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ABSTRACT

The Board of Examination of the Department of Economics at the FernUniversitat commissioned a survey of 315 students who had graduated in economics to gain insights into their experiences both at the FernUniversitat and after completing their studies. A written questionnaire was developed and sent to all of the graduates who had finished their studies through the end of 1984 and 244 questionnaires were returned, for a response rate of 77.5%. The first section of the report presents statistical data on all graduates who had attained degrees through 1985, including their regional origin, the type of degree earned, time taken off from studies, total length of study, age at graduation, and the nature of the academic program taken while at the FernUniversitat. The results of the survey follow, including responses to questions on motivation for studying at the FernUniversitat; effects of studying at a distance on family, social, and professional life; attitudes about the social environment of distance education; employment patterns; and further qualifications gained after earning a degree at the FernUniversitat. Data are presented in the form of statistical tables and student comments. The questionnaire is appended. (26 references) (GL)

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Graduates of the FernUniversität

An Evaluation of their Studies and their Experiences after Graduation

Jörn Bartels

Zentrum für Fernstudienentwicklung

Hagen 1989

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Preface and acknowledgements

The Board of Examination of the Department of Economics at the FernUniversität in the Federal Republik of Germany commissioned me to take up a survey of their graduates to gain insights into the students' experiences both at the FernUniversität and after completing of their studies. For the survey a written questionnaire was developed which were send to all the graduates who had finished their studies till the end of 1984.

In the first part of the report there are presented some statistical data about all graduates who have attained a degree up to the end of 1985. There after are presented the results of the questionnaire survey.

This report is a translation of the German version (Bartels 1986) but it is in some parts abridged.

At this point I want to express my gratitude to all those who have helped and supported me in different ways. First of all I want to thank the great number of graduates who participated in this survey. This high participation rate of the graduates in this survey indicates that the graduates even after completing their studies have a very close relationship to the FernUniversität.

Next to that I want to thank the 'Board of Examination' of the Department of Economics, here especially Dr Heinz Hoffmann and Mrs Gudrun Dorgerloh, of the 'Office of the Registrar' Mr Hans-Joachim Patzwald, the 'Dispatch Section', and the colleagues of the 'Cen-

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Hagen **Jörn Bartels**

Introduction

The FernUniversität (FeU), which is situated in Hagen, started its first study year on October 1, 1975 with only three departments: Economics, Mathematics, and Education. In the following years the number of departments has grown to five. They are: Economics, Mathematics and Computer Sciences, Electrical Engineering, Law, and Educational and Social Sciences.

The FeU has four different categories of students: depending on their previous qualifications and future goals, students can register as full-time, part-time, guest or visiting student.

Degree programs offered are: the 'Diplom', which is a degree in one of the subject areas of Economics, Mathematics, Computer Sciences, and Electrical Engineering; the Teachers-Training Certificate for Secondary Schools; and the Masters Degree.

The FeU was founded in December 1974 to fulfill three educational policy goals (Peters 1976):

1. Creating additional capacity for academic study. The number of school leavers with the university entrance qualification had been growing from year to year in the Federal Republic of Germany (FRG). Because most of these young people wished to study after finishing school, there were not enough places at the conventional universities. A distance education system was considered to be a cost-effective solution to this problem.

2. Supporting the reform of university teaching in post-secondary education. The FeU uses very different media (more than the conventional universities in Germany. Face to face teaching situations are very rare).

3. Developing a system of academic continuing education. Distance education, with its flexibility in time and place of study, makes it the ideal way of offering academic continuous education for those, who because of personal or other reasons (e.g. job, living abroad) are not able to attend a conventional university.

In this report it were not tried to evaluate the original education policy goals with respect to their realization but it were addressed the question: What has become of the FeU graduates? It were evaluated exclusively graduates of the department of Economics, because this department has produced the largest number of graduates at the FeU. In 1979 the first graduate earned a degree, and at the end of 1985 there have been some 414 successful students who finished a short-cycle course of studies (Diplom I) which, for full-time students, is three and a half years of study; or a long-cycle course of studies (Diplom II), which is four years of studying for full-time students. Graduates earn the title 'Diplom-Ökonom'.

In 1981, when the FeU had fifty graduates in economics, there were conducted a first investigation about these graduates (Bartels 1982), by using a catalogue of open questions, an essay written by fourteen graduates about their experiences with distance studies (Bartels 1985). The method used for this research was the biogra-

phic method (Thomas and Znanicki 1927). Because of the short interval between the time of getting the degree and the start of this first investigation it was impossible to include questions about the professional situation of the graduates.

In early 1985 the board of examination of the department of economics suggested to conduct a survey of all the graduates at that time (319). The main aim of this survey was to gain insight into students' experiences both at the FeU and after completing their studies. The results would be useful for the FeU in judging the value and acceptance of its degrees in the labour market which were earned through distance eduction. In 1990 it is proposed to start a follow-up study concentrating on the personal and professional development of the FeU graduates. In general, most of the German universities are "not very much interested, if at all, about the professional careers of their graduates" (Sachsenröder 1985, p. 21). However, the FeU since its foundation has attached more importance on carrying out investigations about students' study progress, and on systematically evaluating the study system and the study material. For this reason it was obvious for the FeU to evaluate the value of its degrees for the students in the labour market.

PART I

1 Survey

A total of 319 students had graduated in economics at the FeU by the end of 1984. For practical and financial reasons a written survey was used. There was no expectation that this would cause any problems because the graduates were used to filling in questionnaires. The questionnaire used for this survey, was twelve pages long. At the end of February 1985, this questionnaire was send to all the graduates together with a joint letter from the 'Board of Examination of the Department of Economics' and the 'Center for the Development of Distance Education'. The graduates also received a reply-paid letter to increase the response rate. The graduates were asked to return the questionnaire to the FeU within one month of receiving it.

Initially, approximately 15 % of the questionnaires were undeliverable because of changes in these students' adresses. Except for four adresses, it was possible to trace all the graduates. After eight weeks a reminder was sent to those graduates who did not respond to the questionnaire. In total there was a response rate of 77.5 % (244 of 315 graduates). This response rate can be considered very high. Investigations at the FeU have never had such a high response rate in the past. This high response rate is probably due on the one hand to the homogeneous target group (Hippler & Seidel 1985) and on the other hand to the pronounced personal attachment of the graduates to the FeU.

1.1 Representativeness

Although the response rate of 77.5 % was extreemly high, the representativeness of the respondents was scrutinized. Although the risk of a systematic response bias with this level of participation seems improbable, the relevant investigation was carried out. The following variables were examined: student category, gender, age of the graduates when they completed their degree, the achieved degree, year of enrolment at the FeU, and the acceptance of the study results of basic courses by other universities. The data were considered to be representative if the data from the participants did not differ more then five percent points from the expected distribution for all graduates.

Table 1 shows the results of this analysis in detail. As expected the values of the evaluated variables are clearly below the fixed mark of five percent. For this reason it is confirmed that the respondents represent all graduates of economics at the FeU.

variables	values	part Pi of the graduates N = 319		part pi of the respondents n = 244		pi - Pi
		number	%	number	%	
student category	full-time	161	50.5	121	49.6	- .9
	part-time	155	48.6	121	49.6	+ 1.0
	part-time	3	.9	2	.8	- .1
sex	male	266	83.4	201	82.4	- 1.0
	female	53	16.6	43	17.6	+ 1.0
age at graduation	< 25 year	8	2.5	6	2.5	± 0
	25 - 31 year	146	45.8	104	42.6	- 3.2
	32 - 38 year	95	29.8	73	29.9	+ .1
	39 - 45 year	46	14.4	39	16.0	+ 1.6
	46 - 52 year	17	5.3	16	6.6	+ 1.3
	> 52 year	7	2.2	6	2.5	+ .3
achieved degree	Diplom I	102	32.0	72	29.5	- 2.5
	Diplom II	198	62.1	157	64.3	+ 2.2
	Diplom I + II	19	6.0	15	6.1	- .1
year of enrolment at the FernUniversität	1975/76	47	14.7	41	16.8	+ 2.1
	1976/77	109	34.2	86	35.2	+ 1.0
	1977/78	73	22.9	54	22.1	- .8
	1978/79	41	12.9	30	12.3	- .6
	1979/80	31	9.7	20	8.2	- 1.5
	1980/81	11	3.4	10	4.1	+ .7
	1981/82 + 1982/83	7	2.2	3	1.2	- 1.0
acceptance of previous study results	some	210	65.8	164	67.2	+ 1.4
	partly	71	22.3	56	23.0	+ .7
	all	38	11.9	24	9.8	- 2.1

Table 1: Examination of the Representativeness

2 Graduate characteristics

In this section some characteristics of those graduates who graduated as 'Diplom-Ökonom' by the end of 1985 at the FeU are presented. This section also gives an answer to the frequently asked question: "How long do students take to graduate?"

2.1 Regional origin

In two out of five cases (39.1 %) the graduates of the FeU lived in a university town during their distance studies. These students could have studied at a conventional university in their home town, but preferred to study at a distance. There must have been other factors such as employment reasons which lead to the stuent's enrolling at the FeU.

Nearly every second graduate (46.9 %) came from North Rhine-Westphalia. It is noticeable that, in general, the distribution of the number of new enrollees from the different states of the FRG are reflected in the statistics of the graduates. Examination of the data shows that the graduating rates are to a large degree independent of the regional origin of the students. Graduates who lived in states with study centers had no better graduating rates than those students who lived in states without study centers (the FRG is a federal state and for this reason study centers do not exist in all the states).

State	number of inhabitants of the place of the residence					total	average part of new enrolled students
	fewer than 10,000	10,000 < 100,000	100,000 < 500,000	500,000 < 1,000,000	more than 1,000,000		
Schleswig-Holstein	29.4	41.2	29.4			4.1	2.7
Hamburg					100	1.9	2.1
Lower Saxony	46.4	32.1	7.1	14.3		6.8	8.0
Bremen				100		1.0	1.1
North Rhine-Westphalia	21.1	24.2	27.3	27.3		46.9	46.8
Hesse	41.7	36.1	5.6	16.7		8.7	9.5
Rhineland-Palantinate	66.7	16.7	16.7			5.8	5.2
Baden-Württemberg	40.0	36.7	23.3			7.2	8.7
Saarland	50.0	33.3	16.7			1.4	1.8
Bavaria	49.0	18.4	18.4		14.3	11.8	9.9
West-Berlin					100	2.7	2.2
forign countries	57.1		14.3	28.6		1.7	2.3
all	32.1	24.6	20.3	16.7	6.3	100	100

Table 2: Regional Origin of the Graduates

(in percent)

In one of the three cases (32.1 %), the graduates lived in a rural area. An above average number of graduates from rural areas were from the following states: Rhineland-Palatinate (66.7 %), Saarland (50.0 %), Bavaria (49.0 %), and Lower Saxony (46.4 %). Every

fourth graduate (24.6 %) lived in a small town (from 10,000 to fewer than 100,000 inhabitants); every fifth graduate (20.3 %) lived in a town with fewer than 500,000 inhabitants; and every sixth graduate (16.7 %) lived in a town with less than one million inhabitants. Only 6.3 % of the graduates came from the three cities with more than one million inhabitants (West-Berlin, Hamburg, Munich). There were also some graduates (1.7 %) from Belgium, Luxembourg, and Switzerland and only a few of these cases were Germans who were living abroad.

2.2 Graduation rates

Nearly every fifth full-time student (18.7 %) who was enrolled in 1975 earned a degree in economics. Even though the absolute number of the female graduates was relatively low in that year (40), it should be mentioned that every fourth female student (25.0 %) earned a degree as compared to only 16.0 % of the male students. If one takes into account also those students who enrolled in 1975 and are still continuing their studies a maximum graduation rate of 19.4 % can be expected.

The graduation rate has dropped for the full-time students of later years. Students who enrolled at the FeU 1976/77 or later cannot achieve the graduation rate of the first enrolment year because the drop-out rates were too high in the past. The students of the 1975 enrolment year are significantly more motivated than students registered later. There is now an expected graduation rate of approximately 12 to 15 %.

year of enrolment	full-time students									part-time students								
	female			male			all			female			male			all		
	students	graduates	%	students	graduates	%	students	graduates	%	students	graduates	%	students	graduates	%	students	graduates	%
1975/76	40	9	22.5	94	15	16.0	134	24	17.9	85	5	5.9	418	23	5.5	503	28	5.6
1976/77	78	9	11.5	301	33	11.1	379	42	11.1	199	11	5.5	1,565	80	5.1	1,764	91	5.2
1977/78	104	7	6.7	358	31	8.7	462	38	8.2	317	4	1.3	1,868	37	2.0	2,185	41	1.9
1978/79	111	5	4.5	341	33	9.7	452	38	8.4	387	5	1.3	1,842	24	1.3	2,229	29	1.3
1979/80	109	5	4.6	332	20	6.0	441	25	5.7	411	3	.7	1,793	9	.5	2,204	12	.5
1980/81	102	2	2.0	383	14	3.7	485	16	3.3	486	0	0	1,893	4	.2	2,379	4	.2
1981/82	170	0	0	427	9	2.1	597	9	1.5	492	0	0	1,527	5	.3	2,019	5	.2
1982/83	125	0	0	275	2	.7	400	2	.5	425	1	.2	1,375	0	0	1,600	1	.0
1983/84	153	1	.6	340	0	0	493	1	.2	585	0	0	1,570	0	0	2,155	0	0

Table 3: Gender Specific Graduation Rates of Full-time and Part-time Students for the Year of Enrolment by the End of 1985

The graduation rate for the part-time students is lower than for full-time students. It is as expected, because the part-time students are mostly in jobs and have many other social obligations and such high graduation rate comparable to full-time students cannot be expected. From the 1975/76 enrolment year, 5.4 % of the part-time students got a degree by the end of 1985. Some of the students registered earlier are still studying for a degree. For this reason it is expected that less than 10 % of the part-time students will pass the final exams at the FeU.

Of the 414 students, 47.1 % were enrolled as full-time students, 51.0 % as part-time students, and 1.9 % as visiting students. Comparing this distribution with the figure of the total distribution of the enrolled students, a very unusual result, given in Figure 1, can be obtained.

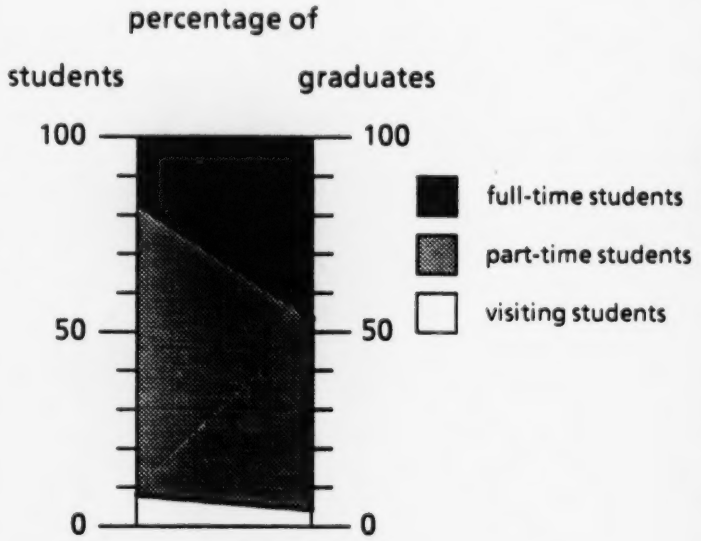

Figure 1: Graduation Rate as a Proportion of the Population of Different Student Categories

Full-time students made up 16.4 % of the students, but constitute 47.1 % of the group of the graduates. The relation for the part-time students is very different: 74.8 % of the students in economics are studying part-time but only 51.0 % of the graduates were part-time students. The situation for visiting students is very similar: 8.3 % of the students were visiting students compared to only 1.9 % of the graduates.

The graduation rates at the FeU verify (with the exception of the full-time students who were enrolled in 1975/76) that, "most of the students at the FernUniversität do not pass the final exams because they drop out in the beginning of their studying" (Bartels & Willén 1985, p. 5). Only a few of the students reach their longed-for "Diplom". Obviously full-time students, in general, have a considerably better chance of success than part-time students, although part-time students are actually the target group of the FeU. The FeU should develop further strategies to expand the number of graduates without lowering its standards.

At this point, some comments about the graduation rates of the FeU in comparison to those of other Distance Teaching Universities (DTU's) and especially those of the British Open University (UKOU) are made. At the beginning of 1984 72,000 students in total, had earned a degree at the UKOU. Of that, some 63,000 students graduated with the Bachelor of Arts (BA open) and some 9,000 students with the Honours degree. These degrees are typically "undergraduate degrees" which are unknown in the FRG. As mentioned earlier, students can earn a degree like a Diplom, Master of Arts or a State Examination. The degree programs in the FRG more closely resemble higher degree programs like the "Master programm" (Bynner 1986) in the Anglo-Saxon countries. As Bynner pointed out, the UKOU teaches only three higher degree programs: an M.Sc. in Advanced Educational and Social Research Methods, an MA in Literature Research Methods and an M.Sc. in Mathematics. These programs are "in OU terms very small scale, with fewer than 100 students in each" (Bynner 1986, p. 24).

There have been long discussions in past in the Anglo-Saxon countries about the implementation of a Masters degree. Many people held the view that it is impossible to teach at the Master's level at a distance. This was also true for the implementation of the Master's degree in Business Administration. The past few years have shown, that the successful implementation of this program is indeed possible and, as Jevons pointed out for Deakin University in Australia, the attrition rates "in the MBA are high, as would be expected from the highly competitive entry, of the order of 90 %" (Jevons 1984, p. 35).

Comparing the FeU graduate statistics to those of other DTU's in higher degree programs, the FeU rates are seen in another light because at other DTU's it is an exception for students to complete their study with a higher degree (Harry 1986), which is the first academic degree at German universities.

2.3 Acceptance of previous study results

In the FRG the study program is divided into two parts: the initial stage of studies ('Grundstudium') and the main stage of studies ('Hauptstudium'). The duration of the initial stage of studies is four semesters for full-time students. In this part of studies exist an obligatory curriculum. After passing all the required exams the students complete with the intermediate exams ('Zwischenprüfung'). In general, this exam has no real value in the labour market if a student will finish at this stage his/her studies, it allows only to continue in the main stage of studies. On the one hand, in the main stage of studies, some of the courses are oblig-

atory, while on the other hand, the students have the choice of personal specialization. The duration of the main stage of studies is three semesters for students who complete with Diplom I, and four semesters for those who complete with Diplom II in the case of full-time studies.

In the FRG a student has freedom to transfer from one university to another and when he/she transfers then the courses passed at the last university can be recognized by the new university or he/she gets credits for them. Out of this reason the student does not have to repeat them. In this section an analysis of the previous study backgrounds and their acceptance by the FeU of the graduates in question are presented.

The results of this survey shows that nearly every second female graduate (51.2 %) and every third male graduate (35.8 %) had no former study experience at a university or "Fachhochschule" (FHS) before studying at the FeU. Thirty-one percent of the graduates (14.0 % of the women and 34.8 % of the men) studied previously at a FHS and 30.3 % (34.9 % of the women and 29.4 % of the men) previously studied at a university. Most of these graduates were already enrolled in economics, but some were enrolled in mechanical engineering, electrical engineering, mathematics, computer sciences or law. While most of the former students of a FHS (26.2 % of 31.1 %) continued their studies at the FeU after getting a degree form a FHS, the same was true only for some of the former students of a university (8.6 % of 30.3 %). FHS-graduates and university-graduates, too, are in most cases men. Every third female graduate (32.6 %) continued studies begun at a conventional university but which had been interrupted by personal circumstances.

The same was true only in case of every fifth male graduate (19.4 %). It is worth mentioning that, in general, the graduates of FHS wanted to obtain a higher degree through distance education, while for most of the former conventional university students the FeU degree would be their first degree.

gender	previous study experiences					n
	no	yes				
		with university degree	without university degree	with FHS degree	without FHS degree	
female	51.2	2.3	32.6	7.0	7.0	43
male	35.8	10.0	19.4	30.3	4.5	201
all	38.5	8.6	21.7	26.2	4.9	244

Table 4: Gender Specific Previous Study Experiences

(in percent)

Previous study results brought to the FeU by the graduates were accepted to different extent at the FeU. This is an indication of the different affinity of the student's original course of studies in comparison to the economics course of studies. Male graduates had more often studied at the post-graduate level than had the female graduates. Of the men, 64.2 % of the graduates had studied earlier, but 66.9 % of them had to study the full program at the FeU. Nearly every second female graduate had former study experience, although 71.6 % had to study the full program at the FeU. Female graduates continued their studies at the FeU more often (17.9 %) than the men (10.1 %) after finishing the initial stage

acceptance of previous study results from the initial stage of studies	gender		
	female	male	total
none	71.6	66.9	67.6
some	10.4	23.1	21.0
all	17.9	10.1	11.4
N	67	347	414

Table 5: Gender Specific Acceptance of Previous Study Results from the Initial Stage of Studies

(in percent)

of studies at a conventional university. The male graduates more often (23.1 %) received credit for prevoius study results from the initial stage of studies than the female graduates (10.4 %).

Graduates who earned their degree between 1979 and 1982 less often studied the full program at the FeU (57.7 %) than graduates who got their degrees later (73.2 %). The FeU more often accepted some

acceptance of previous study results from the initial stage of studies	Diplom I			Diplom II		
	≤ 1982	> 1982	total	> 1982	≤ 1982	total
none	45.2	73.0	64.8	62.6	73.3	69.1
some	21.4	15.0	16.9	28.0	20.0	23.2
all	33.3	12.0	18.3	9.4	6.7	7.7
N	42	100	142	107	165	272

Table 6: Acceptance of Previous Study Results from the Initial Stage of Studies

(in percent)

(26.2 % vs 18.1 %) or all (16.1 % vs 8.7 %) study results of the initial stage of studies from them compared to the 1983 or later graduated students. Graduates with the Diplom I, who finished their study in 1982 or earlier, in most of the cases (54.8 %) received credit for previous study results, while the same was true only for a minority of other graduates.

2.4 Kind of Diplom degree

The FeU is a comprehensive university (Gesamthochschule). For this reason, the students can chose to study a short-cycle (Diplom I) or a long-cycle (Diplom II) course of studies. Students without the formal university entrance qualification ('Abitur'), but who have earned the 'Fachhochschulreife' can only study through short-cycle program. If they pass three additional bridge courses ('Brückenkurse'), they have the opportunity to earn a degree in the long-cycle course of studies. Graduates who earned a Diplom I degree may also up-grade their degree to a Diplom II degree if, after their first degree, they study an additional subject area and take some more courses from other subject areas.

For most of the graduates it was the exception to leave the FeU with earning a Diplom I. Every third graduate (34.3 %) got this degree, while 60.9 % earned the Diplom II degree. A further 4.8 % of the graduates (exclusively men!) earned the Diplom I as well as the Diplom II. Graduates with a Diplom I degree had nearly the same university entrance qualifications as graduates who earned a Diplom II.

student category	acceptance of previous study results from the initial stage of studies	female			male			
		Diplom I	Diplom II	N	Diplom I	Diplom II	Diplom I + II	N
full-time	none	11.5	88.5	26	28.6	67.0	4.5	112
	some	20.0	80.0	5	25.0	68.8	6.3	32
	all	57.1	42.9	7	46.2	38.5	15.4	13
	total	21.1	78.9	38	29.3	65.0	5.7	157
part-time	none	31.8	68.2	22	41.4	50.9	7.8	116
	some	50.0	50.0	2	28.3	67.4	4.3	46
	all	80.0	20.0	5	55.0	45.0		20
	total	41.4	58.6	29	39.6	54.4	6.0	182
visiting	none				50.0	50.0		4
	some				50.0	50.0		2
	all				50.0	50.0		2
	total				50.0	50.0		8
total	none	20.8	79.2	48	35.3	58.6	6.0	232
	some	28.6	71.4	7	27.5	67.5	5.0	80
	all	66.7	33.3	12	51.4	42.9	5.7	35
	total	29.9	70.1	67	35.2	59.1	5.8	347

Table 7: Earned Degree Differentiated at Student Category, Acceptance of Previous Study Results, and Gender

(in percent)

The percentage of women in the group of students enrolled in economics was 26.2 %. It is remarkable that the percentage of women in the group of graduates is only 16.2 %. Accordingly, female students more often finished their studies without a degree than male students. The same is true at the comprehensive university of Siegen where the percentage of women graduates (14.7 %) is as low as at the FeU (Klein 1986).

Only some of the full-time students (27.7 %) have completed their study with a Diplom I, but the percentage of the part-time (39.8 %) and visiting students (50.0 %) is significantly higher.

Women more often preferred (70.1 %) Diplom II than male graduates (64.8 %). Women studying as full-time students earned a Diplom II in 8 out of 10 cases (78.9 %). The same is true in 58.6 % of the cases for female part-time students.. In comparison to the women, this fact is less pronounced for men. The percentage of men with a Diplom I degree is 29.3 % for full-time students but 39.6 % for part-time students.

Students who changed from a conventional university to the FeU after the initial stage of studies in most of the cases (55.3%) obtained a Diplom I degree, but this fact is true only for some of those students (28.4 %) who were given less credit by the FeU for previous study results in the initial stage of studies. This small percentage is understandable in so far, as every second graduate of this group earned a degree from a FHS, and they enrolled especially to get a university degree at the FeU.

A significant majority of the women (66.7 %) and the men (51.4 %) who changed to the FeU after completing their initial stage of studies at a conventional university did this because of the length of their previous study. They have studied a large number of semesters at a conventional university without the prospect of earning a university degree. At the FeU they had the chance to complete a Diplom I degree instead of dropping out at a conventional university without a degree. Some of the graduates changed from a conventional university to the FeU because they no longer had the money for their studies and they had to start a professional career. It was easier for them to coordinate their job activities with studying at a distance than with studying at a conventional university

One can differentiate the FeU graduates according on their previous study experiences. Female graduates, who had no previous study experiences, or who studied at a FHS, in most cases earned the Diplom II degree (86.4 % and 100 % respectively). The results for the group of male graduates who were also university- and FHS-graduates are remarkable. Male graduates, who already had a university degree, in most cases (65.0 %) studied only for a Diplom I degree (second degree) so as to be better qualified in the field of economics in their occupation. Graduates of a FHS, who already possess the equivalent of a Diplom I degree, in eight of ten cases (82.0 %), as might be expected, earned the academic degree (Diplom II). Of those male graduates, who did not earn a degree while studying at a university or at a FHS, nearly every second (44 %) earned a Diplom I degree at the FeU. As mentioned earlier, most of these graduates are probably content, because they have at least

former studies	female			male		
	Diplom I	Diplom II	n	Diplom I	Diplom II	n
no	13.6	86.4	22	26.4	73.6	72
yes, with a university degree	100		1	65.0	35.0	20
yes, without a university degree	28.6	71.4	14	43.6	56.4	39
yes, with a FHS-degree		100	3	18.0	82.0	61
yes, without a FHS-degree		100	3	44.4	55.6	9
total	18.6	83.4	43	31.8	68.2	201

Table 8: Former Studies in Relation to the Gender and the Kind of Diplom

(in percent)

earned a degree. In past, they had no success in completing their studies with a degree in the conventional system. For this reason, a Diplom I degree was the most likely attainable degree for them.

2.5 Length of studying

For the short-cycle study (Diplom I degree), full-time students have to study a minimum of 7 semesters to get a degree. For part-time studies they need double the amount of time (which is a work-load of 20 hours a week at the FeU). The long-cycle study (Diplom II degree) has a length of a minimum of 8 semesters for full-time students and 16 semesters for part-time students.

As mentioned in the prior section, for every third graduate the FeU accepted to a more or less extent the number of previous study results from conventional universities or FHS. These graduates have therefore studied some semesters at another institution. This number of semesters has to be added to the individual number of semesters taken at the FeU. Doing this, the total length of the course of studies and not just the length of studying at the FeU is obtained. In this way the number of semesters the students took off is considered as a compensation.

2.5.1 Time taken off from studying

Every fifth graduate (20.0 %) has had time off while studying at a distance. It is important to note that the graduates have had time off since the introduction of fees for the study material. Students who graduated in 1981 or earlier were not given time off. Since then, every third graduate uses this possibility (1982 2.7 %; 1983 24.4 %; 1984 34.8 %; 1985 31.9 %). It is obvious that now the students take time off to save costs in most of those cases when they have completed their studies in the time allowed, and/or they have already received the necessary study material for completing their study. Some of the graduates take time off for one or more semesters for occupational reasons or to write their thesis. The extent to which the drop in time off taken in 1985 may interpreted as a general turning point cannot be determined, because this drop could be caused exclusively by the graduates with a Diplom I degree. It can not be assumed that paying fees has lead to a continuing effect in this regard.

Diplom I graduates (25.3 %) have taken more than the average time off. Looking at the different years of graduation, the extent of this can be seen very clearly. In 1983 41.4 %, in 1984 42.9 % and in 1985 37.8 % of the Diplom I graduates took time off. The same is true, in general, for fewer of the Diplom II graduates 16.5 %). The relevant numbers are: 1983 15.4 %; 1984 30.0 %; 1985 31.4 %.

Part-time students (24.6 %) - and especially women (34.5 %) - have taken time off more often than the full-time students (15.4 %) or visiting students (one out of eight).

student category	female	male	total
full-time	5.3	17.8	15.4
part-time	34.5	23.1	24.6
visiting		12.5	12.5
total	17.9	20.5	20.0

Table 9: Percentage of Graduates who have Taken Time Off

In many cases, the graduates have taken time off for one (45.8 %) or two semesters (32.5 %). A further 13.3 % of the graduates were excused for three semesters. It was the exception if students were excused for a longer period. Part-time students, in most of cases, took time off for only one semester (51.9 %), the same was true for every third full-time student (36.7 %). They were excused more often for two semesters (46.7 %) than the part-time students (23.1 %).

number of semesters taken taken off	student category	
	full-time	part-time
1	36.7	51.9
2	46.7	23.1
3	10.0	15.4
4	3.3	9.6
5	3.3	
n	30	52

Table 10: Number of Semesters Taken Time Off for Full-time and Part-time Students
(in percent)

2.5.2 Total length of study

In 1985, students of economics in the FRG on average completed their studies with a Diplom I degree after 7.4 semesters and with a Diplom II degree after 11.2 semesters (Der Bundesminister für Bildung und Wissenschaft 1987). At the FeU full-time students completed their studies, on average, after 10.6 semesters (Diplom I) or 10.7 semesters (Diplom II). It is noteworthy that on the one hand there is a significant difference for the Diplom I graduates of the FeU compared to the average of the FRG, and on the other hand FeU Diplom II graduates studied a half year less to obtain the degree than their counterparts at conventional universities. The fact that graduates of the Diplom II at the FeU completed their degree somewhat faster than the Diplom I graduates is surprising in so far as the period of time within which the students have to complete their studies is one semester longer for them.

student category	gender	Diplom I	Diplom II
full-time	female	10.8	10.8
	male	10.6	10.7
	total	10.6	10.7
part-time	female	15.0	13.5
	male	13.1	14.1
	total	13.3	14.0
visiting	female		
	male	9.5	11.0
	total	9.5	11.0

Table 11: Average Number of Semesters for Completing the Study

(in percent)

Part-time students did not, on average, need double the amount of time of full-time students. They graduated after 13.3 semesters (Diplom I) or 14.0 semesters (Diplom II) respectively.

It is interesting to note that having a full-time job while studying at a distance has had not significant influence on the length of the study for full-time as well as for part-time students. These findings are surprising in the light of FeU drop-out studies in the past. These studies have shown that a full-time job is incompatible with full-time studies at the FeU, as evidenced by the fact that most of these students dropped out very early in the course of their studies (Bartels & Fritsch 1976).

In Figures 2 and 3, there is illustrated the distribution of the average length of the study because these figures give a better overview than the average value.

Of the full-time students with a Diplom I, 17.5 % of the graduates got the degree within seven semesters in which the students have to complete their studies, and the same was true for 1.1 % part-time students. Of the full-time students, 52.4 % studied between 8 and 11 semesters, but only 23.2 % part-time students studied for so long. In most of the cases (56.8 %), part-time students completed their studies after 12 to 15 semesters. Only 22.2 % of the full-time students needed this number of semesters. More than 15 semesters were required by 7.9 % of the full-time and 18.9 % of the part-time students.

The distribution of the length of time taken for studying has a less strong effect for the Diplom II than for the Diplom I. Within eight semesters, 12.8 % full-time students completed their studies successfully. The majority of the full-time students (55.3 %) completed their studies between the ninth and eleventh semesters, compared to 14.2 % part-time students. Most of the part-time students (55.9 %) got their degree between the twelfth and the fifteenth semesters, but the same was also true for 29.8 % full-time students. For the full-time students it was an exception to complete their studies after 15 semesters (2.1 %), while nearly every third part-time student (29.9 %) required this much time.

Differences in the length of study between male and female students exist only among part-time students. On average the number of semesters required by women in part-time studies of the Diplom

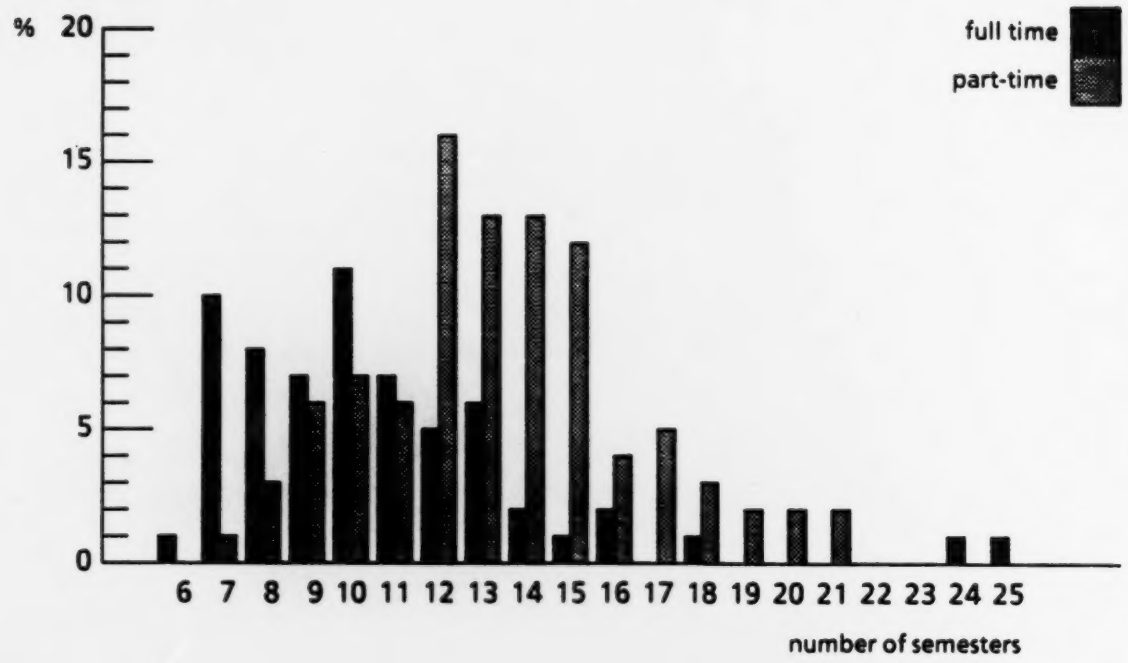

Figure 2: Length of Studying for Full-time and Part-time Students for Completing the Diplom I

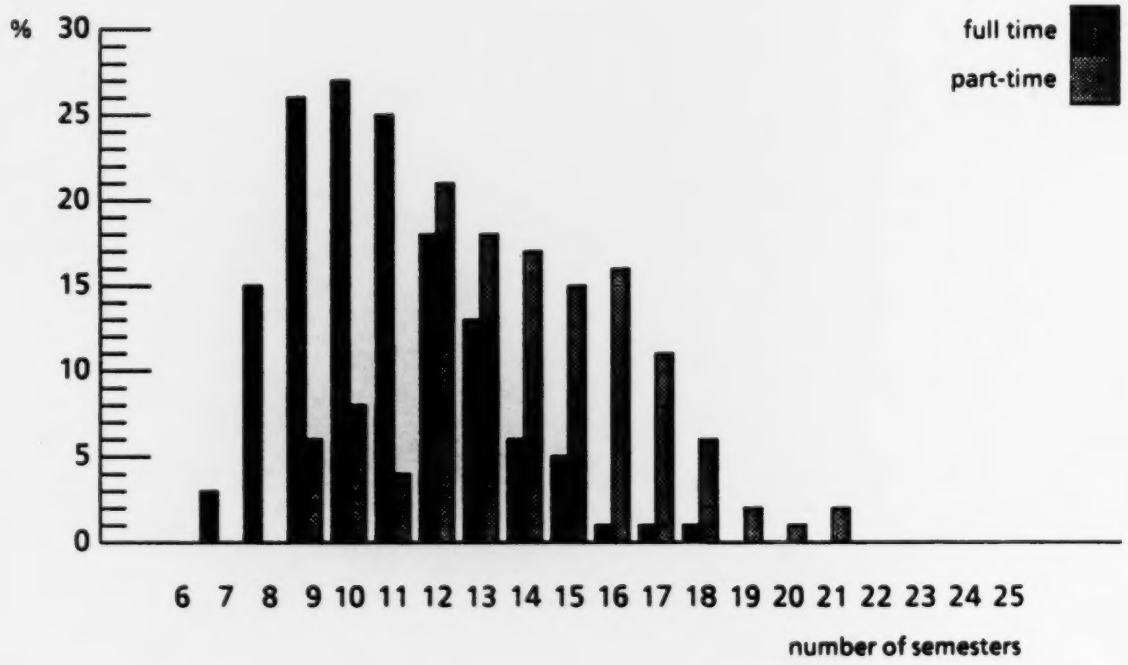

Figure 3: Length of Studying for Full-time and Part-time Students for Completing the Diplom II

I was 15.0 semesters and for the men was 13.1 semesters. Female graduates finished their Diplom II course of studies more quickly (13.5 semesters) than women in the Diplom I and also more quickly than male Diplom II graduates (14.1 semesters). The large number of semesters required by the female part-time students in the Diplom I is an indication of the difficulties the women probably have while studying.

Graduates who studied exclusively at a distance finished their studies faster than those who first studied a greater or lesser part of their course at a conventional university.

student category	gender	average number of semesters			
		Diplom I		Diplom II	
		initial stage of studies	main stage of studies	initial stage of studies	main stage of studies
full-time	female	4.1	6.6	4.8	6.1
	male	6.2	4.5	5.0	5.8
	total	5.9	4.7	4.9	5.8
part-time	female	7.8	7.2	6.0	7.5
	male	6.9	6.2	6.6	7.5
	total	7.0	6.3	6.5	7.5
visiting	female				
	male	5.8	3.8	5.5	5.5
	total	5.8	3.8	5.5	5.5

Table 12: Average Number of Semesters for Studying the Initial Stage of Studies and Main Stage of Studies

(in percent)

Graduates with a Diplom I degree studied the initial stage of studies more slowly (5.9 semesters) than graduates with a Diplom II degree (4.9 semesters). There are remarkable differences between male and female full-time students who earned the Diplom I. While the female graduates completed the initial stage of studies faster than the average did (4.1 semesters), they needed a relatively long time (6.6 semesters) for the main stage of studies. For the male gradutes the reverse was true. They had a slower start at the beginning of their studies (6.2 semesters for the initial stage of studies), but they completed the last exams of their main stage of studies of the Diplom I after 4.5 semesters.

The rate of work in the main stage of studies compared to the initial stage of studies of the Diplom II graduates was more often the same (39.3 %) than was the case for the Diplom I graduates (18.5 %). Male full-time students completed the main stage of studies faster (41.8 %) than the initial stage of studies, while, in general, most of the other graduates studied the main stage of studies slower (Table 13). The reason for this is that the initial stage of studies is rigidly structured while the students in the main stage of studies have a lot of individual options. In this case the individual student has the burden of much more responsibility for taking the subjects. It is to mention that some of the graduates must have had problems. On average, female graduates completed the main stage of studies at a slower pace than the male graduates. This is more often true in the group of Diplom I graduates than it is the case in the group of Diplom II graduates.

student category	gender	main stage of studies versus initial stage of studies							
		Diplom I				Diplom II			
		rate of work				rate of work			
		slower	the same	faster	N	slower	the same	faster	N
full-time	female	100			8	43.3	36.7	20.0	30
	male	34.5	23.6	41.8	55	32.4	42.3	26.1	111
	total	42.9	20.6	36.5	63	34.8	40.4	24.8	141
part-time	female	50.0	41.7	8.3	12	47.1	35.3	17.6	17
	male	50.6	14.5	34.9	83	34.5	37.3	28.2	110
	total	50.5	17.9	31.6	95	36.2	37.0	26.8	127
visiting	female								
	male			100	4		75.0	25.0	4
	total			100	4		75.0	25.0	4
total	female	70.0	25.0	5.0	20	44.7	36.2	19.1	47
	male	43.0	17.6	39.4	142	32.9	40.0	27.1	225
	total	46.3	18.5	35.2	162	34.9	39.3	25.7	272

Table 13: Rate of Work in the Main Stage of Studies Compared with the Initial Stage of Studies

(in percent)

2.6 Age at graduation

Graduates who earned Diplom II degree were, on average, younger than those who got Diplom I degree. The differences in the age of the graduates in relation to the student category are very significant. Part-time students were significantly older when they graduated (Diplom I 37.5 year old; Diplom II 37.2 year old) than the full-time students (Diplom I 31.9 year old; Diplom II 30.1 year old). Visiting students, on average, had the youngest graduates (Diplom I 27.0 year old; Diplom II 25.8 year old). Differences between the age of the female and male graduates are not significant.

Figures 4 and 5 show that the age distribution of the graduates differs considerably and it does not correspond to the standard normal distribution. Some different age groups among the graduates can be identified. In particular in the group of full-time students who earned Diplom II, and somewhat less for Diplom I graduates, some graduates who are comparable in age to graduates of conventional universities can be identified. They are younger than 29 at the time of graduation. Nearly every second (48.2 %) full-time Diplom II student and every fourth Diplom I graduate (28.6 %) is in this age group. Every third (38.3 %) Diplom II graduate belongs to the age group 29 to 34 years, but only 13.5 % full-time students are older than 34 years. Full-time Diplom I students are in most of the cases (58.7 %) in the age group 29 to 36 years. Only every eighth graduate (12.8 %) was older than 36 years. As mentioned earlier the part-time students were considerably older when they graduated as compared to the full-time students, although they needed, on average, only 3 semesters longer to com-

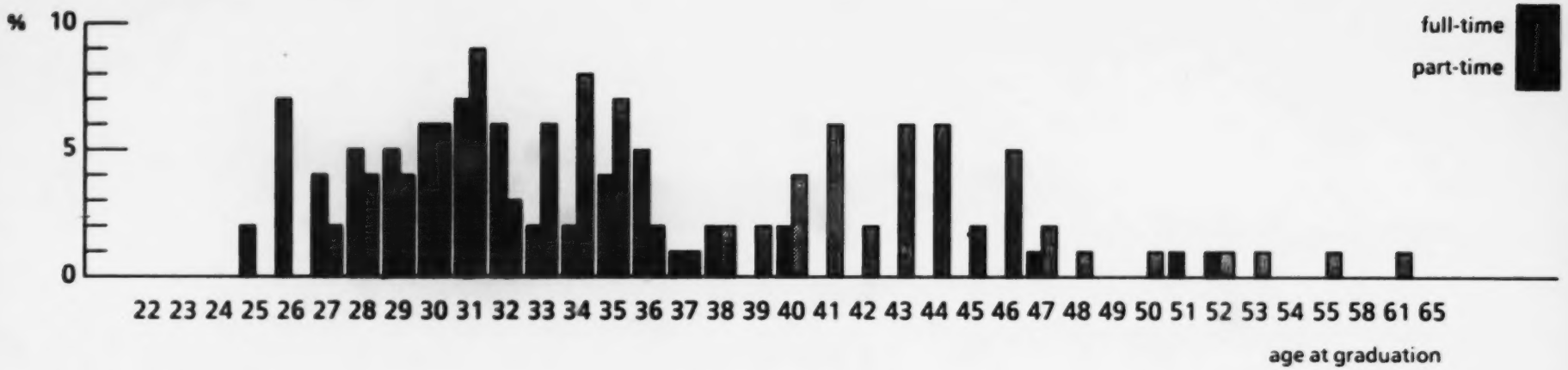

Figure 4: Age of Diplom I Students at the Time of Graduation

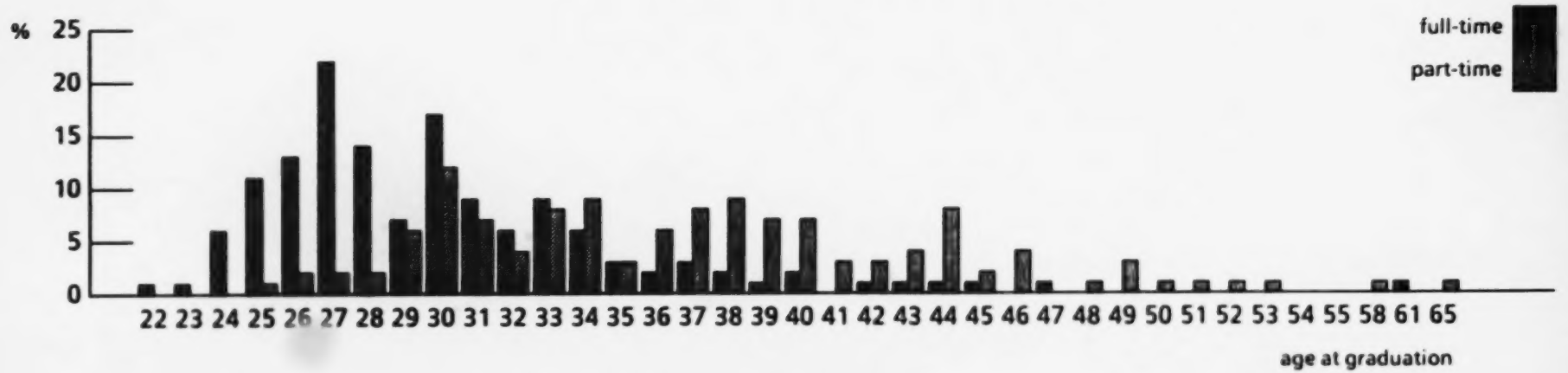

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Figure 5: Age of Diplom II Students at the Time of Graduation

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plete the course of studies. The students of this category were, in general, older when they enrolled at the FeU. In comparison to the full-time students only a small number of graduates from the group of the part-time students completed their studies at the FeU at relatively young age. Approximately every tenth Diplom I or Diplom II student earned the degree at the age of 30 or below. This age group is indeed not typical for part-time students. However, of the middle aged Diplom I graduates, 41.1 % of the cases are in the age group between 30 and 35 year when they got their degrees. Only 17.9 % are in the age group of the 36 to 41 year old at graduation. Remarkable is that every fourth Diplom I graduate (25.3 %) belongs to the midlife-crisis age group of 42 to 48. Of the group of the part-time students who earned a Diplom II there are 63.0 % in the age group between 30 and 40. Nearly every fifth graduate (18.9 %) belongs to the 41 to 46 year old age group. Of the part-time students, who completed their study with a Diplom II 7.9 % are older than 46.

3 Choice of subjects

Students in the Economics program at the FeU have to complete the following required courses:

Diplom I degree:

- Required core subjects in Business Administration I
  (240 working hours)

- Required core subjects in Political Economics I
  (240 working hours)

- Specialization subjects I
  (320 working hours)

- Optional subjects
  (320 working hours)

Diplom II degree:

- Required core subjects in Business Administration II
  (480 working hours)

- Required core subjects in Political Economics II
  (480 working hours)

- Specialization subjects II
  (560 working hours)

- Optional subjects
  (320 working hours)

- Supplementary subjects
  (320 working hours)

All courses in the required core subjects of business administration and political economics are prescribed and, therefore, the students do not have a choice. The reverse is true for the specialization subjects, the optional subjects, and the supplementary subjects. The students have a choice in these subjects to elect some of the offered courses for their study.

In this section, a general idea about the courses and the subjects the graduates have taken, is given.

3.1 Specialization subjects

Fifteen of the twenty female graduates who completed Diplom I took one of the following specialization subjects: 'Trade' (30.0 %); 'Taxes of Business Administration' (25.0 %); of 'Bank and Stock Market' (20.0 %). The male graduates took as specialization subjects 'Trade'; and 'Bank and Stock Market' (both subjects were taken by 29.5 % of the male graduates). In addition every fourth graduate (23.8 %) studied the 'Economics of Production'.

Female Diplom II graduates studied mainly one of the following specialization subjects: 'Marketing' (27.7 %); 'Finance' (23.4 %); or 'Taxes of Business Administration' (23.4 %). Male graduates

specialized subjects for the Diplom I degree	female	male	specialized subjects for the Diplom II degree	female	male
Bank and Stock Market	20.0	29.5	Organization and Planning		3.1
Organization and Planning	5.0		Marketing	27.7	22.2
Trade	30.0	29.5	Finance	23.4	19.6
Taxes of Business Administration	25.0	9.0	Taxes of Business Administration	23.4	24.9
Financial and Monetary Policy	10.0	7.4	Financial and Monetary Policy	10.6	7.1
Public Economics		.8	Public Economics	2.1	5.3
Policy of Growth and Economics	5.0		Policy of Growth and Economics	2.1	.9
Economics of Production	5.0	23.8	Industrial Management	10.6	16.0
			Operations Research		.9
N	20	122	N	47	225

Table 14: Subject Specializations of the Female and Male Graduates

(in percent)

took different specialization subjects. Men preferred the subjects: 'Taxes of Business Administration' (24.9 %) and 'Marketing' (22.2 %). Every fifth male graduate (19.6 %) studied 'Finance', and every sixth (16.0 %) 'Industrial Management'.

3.2 Optional subjects

Most of the graduates (85.0 %) took 'Business Law' as an optional subject. The only other subject that was taken as optional subject by a significant number of graduates was 'Econometrics' (9.4 %).

optional subjects for the Diplom I degree	female	male
Trade		.8
Economics of Production		.8
Business Law	95.0	86.1
Operations Research	5.0	5.7
Econometrics		6.6
N	20	122
optional subjects for the Diplom II degree	female	male
Industrial Management		.9
Statistics	2.1	.4
Business Law	83.0	83.6
Operations Research	2.1	4.0
Econometrics	12.8	11.1
N	47	225

Table 15: Optional Subjects of the Female and Male Graduates
(in percent)

3.3 Supplementary subjects

The students studying for Diplom II have to study, as a rule, one supplementary subject. Every fifth female graduate (21.3 %) took one of the following subjects: 'Bank and Stock Market', 'Marketing', or 'Financial and Monetary Policy'. Most of the other subjects were studied only by some female graduates.

supplemental subjects for the Diplom II degree	female	male
Bank and Stock Market	21.3	33.8
Organization and Planning		3.6
Marketing	21.3	12.4
Finance	6.4	5.8
Taxes and Business Administration	8.5	7.1
Financial and Monetary Policy	21.3	12.0
Public Economics		1.8
Policy of Growth and Economics	2.1	1.8
Industrial Management	10.6	16.9
Business Law	2.1	2.2
Operations Research	2.1	2.2
Statistics	4.3	.4
N	47	225

Table 16: Supplementary Subjects by Female and Male Graduates

(in percent)

Male graduates preferred 'Bank and Stock Market' (33.8 %) as a supplementary subject. Other subjects have a lower number of stuents. For example, 'Industrial Management' was chosen by 16.9 % of the students, 'Marketing' by 12.4 % and 'Financial and Monetary Policy' by 12.0 %.

3.4 Motives for the choice of subjects

All the subjects taken by the graduates are shown in Table 17.

subjects	Diplom I		Diplom II	
	female	male	female	male
Bank and Stock Market	20.0	29.5	21.3	33.8
Organization and Planning	5.0			6.7
Marketing/Trade	30.0	30.3	48.9	34.7
Finance			29.8	25.3
Tax of Business Administration	25.0	9.0	31.9	32.0
Financial and Monetary Policy	10.0	7.4	31.9	19.1
Public Economics		.8	2.1	7.1
Policy of Growth and Economics	5.0		4.3	2.7
Economics of Prod./Indust.Management	5.0	24.6	21.3	33.8
Business Law	95.0	86.1	85.1	85.8
Operations Research	5.0	5.7	4.3	7.1
Econometrics		6.6	12.8	11.1
Statistics			6.4	.9
N	20	122	47	225

Table 17: Choice of Subjects in Relation to Gender and Diplom

(in percent)

Six out of seven graduates (86.2 %) studied 'Business Law' and the subject has the largest number of students. All the other subjects have a much lower student number. For female graduates (43.3 %) as well as for male graduates (33.1 %) 'Marketing'/'Trade' is in the second position. While the men less often studied the subjects 'Bank and Stock Market' (32.3 %) and 'Economics of Production'/ 'Industrial Management' (30.5 %) women had a different priority.

The third most popular subject among female graduates was 'Taxes in Business Administration' (29.9 %), followed by 'Financial and Monetary Policy' (25.4 %). In the fifth position are the subjects 'Bank and Stock Market' and 'Finance', each chosen by 20.9 % of the female graduates. Amongst the men only every fourth studied the subject 'Taxes of Business Administration (23.9 %) and every sixth 'Finance' (16.7 %).

Men preferred the subjects: 'Public Economics' (among 18 students was only one woman) and 'Organization and Planning' (among 16 students was only one woman). The subjects 'Economics of Production'/ 'Industrial Management' (9.4 % of the enrollees were women and 'Bank and Stock Market' (11.1 % of the enrollees of this subject were women) were preferred more by male graduates. The number of women who took the subject 'Financial and Monetary Policy' (25.4 %) was above average.

Looking at the choice of subjects in relation to the student category of the graduates (Table 18), it can be noticed that there are no differences in the first five subjects preferred by Diplom I graduates.

However, there are differences among Diplom II graduates. While 'Business Law' and 'Marketing' were studied to the same extent by full-time as well as part-time students. Full-time students preferred more subjects like 'Bank and Stock Market' (36.4 %) and 'Finance' (29.5 %). These subjects rank at the fifth (25.0 %) or the sixth position (24.1 %) respectively for the part-time students. Part-time students, in contrast, more often studied 'Industrial Management' (34.5 %).

subjects	Diplom I			Diplom II		
	student category					
	full-time	part-time	visiting	full-time	part-time	visiting
Bank and Stock Market	33.3	25.0	25.0	37.6	26.0	
Organization and Planning	1.9			1.4	10.2	
Marketing/Trade	35.2	28.6		39.0	36.2	
Finance				29.1	22.8	25.0
Tax of Business Administration	7.4	14.3		31.2	30.7	100
Financial and Monetary Policy	9.3	7.1		19.1	22.8	50.0
Public Economics		1.2		5.0	7.9	
Policy of Growth and Economics		1.2		2.1	3.9	
Economics of Production/Industr.Management	13.0	25.0	75.0	29.1	34.6	25.0
Business Law	88.9	88.1	50.0	87.2	83.5	100
Operations Research	3.7	4.8	50.0	5.0	8.7	
Econometrics	7.4	4.8		11.3	11.8	
Statistics				2.8	.8	
N	54	84	4	141	127	4

Table 18: Choice of Subjects in Relation to the Student Category and Diplom

(in percent)

In Table 19 the choice of the supplementary subjects in relation to the specialized subjects taken are presented. This gives a perspective of the subject combinations of the graduates. The women who studied 'Marketing' as their specialized subject offered 'Financial and Monetary Policy' (46.2 %) or 'Bank and Stock Market' (30.8 %) as their supplementary subject. Men preferred 'Economics of Production' (30.0 %), followed by 'Bank and Stock Market' (26.0 %).

Female as well as male graduates, who studied 'Finance' as a specialty have taken as their first preferred subject 'Bank and Stock Market' and in second position 'Trade'. Every second male student who took the subject 'Tax of Business Administration' as a specialized subject studied 'Bank and Stock Market' (47.6 %) as a supplementary subject. This was not true for the female graduates; they preferred 'Trade' or 'Financial and Monetary Policy'.

Every third graduate (32.4 %) who took specialization in political economics also took their supplementary subject from political economics. More relevant is the subject orientation among graduates with a specialized subject in business administration. In 84.3 % of the cases they also took a subject from the field of business administration as the supplementary choice.

What was the reason for the specializations of the graduates in their studies? Obviously women avoided some subjects and preferred other subjects. Women more often took subjects in political economics. More often than the men (38.3 %), the women (46.5 %), stated that they have taken their specialization mostly out of personal interest. It may be supposed that they hoped to be con-

subject specializations	gender	supplemental subjects												
		Bank and Stock Market	Organization and Planning	Trade	Finance	Tax of Business Administration	Financial and Monetary Policy	Public Economics	Policy of Growth and Economics	Economics of Production	Business Law	Operations Research	Statistics	N
Organization and Planning	female													
	male	57.1		14.3						28.6				7
	total	57.1		14.3						28.6				7
Marketing	female	30.8					46.2			23.1				13
	male	26.0	10.0		8.0	10.0	10.0			30.0	2.0	4.0		50
	total	27.0	7.9		6.3	7.9	17.5			28.6	1.6	3.2		63
Finance	female	36.4		27.3		27.3					9.1			11
	male	34.1	2.3	22.7		13.6	4.6			22.7				44
	total	34.5	1.8	23.6		16.4	3.6			18.2	1.8			55
Tax of Business Administration	female			36.4	27.3		36.4							11
	male	44.6		12.5	8.9		19.6	1.8		12.5				56
	total	37.3		16.4	11.9		22.4	1.5		10.4				67
Financial and Monetary Policy	female	40.0		40.0						20.0				5
	male	50.0		6.3				12.5	6.3	18.8	6.3			16
	total	47.6		14.3				9.5	4.8	19.0	4.8			21
Public Economics	female												100	1
	male	16.7				16.7	50.0				8.3	8.3		12
	total	15.4				15.4	46.2				7.7	7.7	7.7	13
Policy of Growth and Economics	female									100				1
	male								50.0				50.0	2
	total								33.3	33.3			33.3	3
Industrial Management	female			20.0		20.0			20.0			20.0	20.0	5
	male	25.0	5.6	25.0	11.1	8.3	8.3		8.3		2.8	5.6		36
	total	22.0	4.9	24.4	9.8	9.8	7.3		9.8		2.4	7.3	2.4	41
Operations Research	female													
	male									50.0	50.0			2
	total									50.0	50.0			2

Table 19: Specialization Subjects in Relation to the Supplementary Subjects

(in percent)

fronted with subject matter which on the other hand would be very useful in their private life but on the other hand would also be relevant to their employment. With the background they could obtain from the subjects studied, women could have the opportunity to be self-employed and would be less dependent on the male related hierachy of the industrial working world. Maybe women did not always have the right idea about the subject content because they often received relatively poor grades in their specialization subjects.

The male graduates more often took their specialization subject because of better professional usability (Weber 1979) and therefore, they chose their subjects from the point of view of professional qualification. Their personal interests in the subject very often agreed with aspects of their professional qualification (31.3 %) than was the case for the female graduates (20.9 %).

Among the subjects offered to large number of graduates, the subject 'Economics of Production'/'Industrial Management' is noteworthy. Every second graduate (51.4 %) who took this subject as a specialization or supplementary subject said that he/she took it because of personal interest. Subjects like 'Tax of Business Administration' (28.1 %), 'Finance' (32.7 %), 'Bank and Stock Market' (34.8 %), or 'Trade'/'Marketing' (35.9 %) were seldom taken for personal interest - occupational motives were the relevant goals for the choice of subjects. Students interest in using knowledge from these subjects at the job was a more relevant factor than was the actual content.

motives for taking a specialization subject in the main stage of studies	Diplom I			Diplom II			all		
	female	male	total	female	male	total	female	male	total
personal interest	62.5	42.2	44.4	42.9	36.5	37.8	46.5	38.3	39.8
needed qualifications of special subjects				5.7	2.2	2.9	4.7	1.5	2.0
has taken a part of the subjects out of personal interest, another part out of professional qualification aspects	12.5	23.4	22.2	22.9	30.7	29.1	20.9	28.4	27.0
both: personal interest and professional qualification aspects agreed	25.0	34.4	33.3	20.0	29.9	27.9	20.9	31.3	29.5
others				8.6	.7	2.3	7.0	.5	1.6
n	8	64	72	35	137	172	43	201	244

Table 20: Motives for Taking a Specialization Subject in the Main Stage of Studies

(in percent)

The former occupational training of the graduates probably had an important influence on the students' choice of study specialization. It is to expect that there is to a certain extent some affinity between the occupational training of a student and the specialization/supplementary subject selected.

To examine this hypothesis the occupational training of the graduates is cross tabulated with the specialization/supplementary subjects. About 41.0 % of the graduates had no apprenticeship, or practical training. Every third graduate (37.3 %) was once a management trainee and every fifth graduate (21.7 %) had training for non-business job. More often the women (48.8 %) than the men (39.3 %) did not complete professional training. But if women completed such a training, in most of the cases it was in management (48.8 %). Graduates with a non-management training were nearly exclusively men.

apprenticeship, practical training	female	male	all
management training	48.8	34.8	37.3
non-management training	2.3	25.9	21.7
no apprenticeship, no practical training	48.8	39.3	41.0
n	43	201	244

Table 21: Apprenticeship or Practical Training of the Graduates

(in percent)

Graduates without a certificate of apprenticeship or practical training are best represented in the total population on the question of taking a specialization/supplementary subject. The situa-

tion is very different for graduates who served apprenticeship or practical training. Graduates with non-management training preferred especially the subject 'Economics of Production'/'Industrial Management'. With the study of this subject they probably wanted to broaden their competence in business in their jobs, which in most of the cases were technical jobs. Every second graduate of this group who completed the Diplom II also studied 'Marketing'. It was only an exception that graduates with non-management training took one of the other subjects.

Most of graduates with previous management training refrained from studying 'Economics of Production'/'Industrial Management'. They referred the subjects 'Financial and Monetary Policy' and 'Bank and Stock Market'. This latter subject was taken particularly by male graduates. The reason for that might be that only some women had success in the past in getting higher positions in a bank. Most of the women will have abstained from these subjects from the start because in their eyes their chance to get a more responsible job was very low.

Nine out of eleven graduates (81.8 %) who were engineers or natural scientists and who completed the studies with a Diplom I, took the 'Economics of Production' as a specialization subject. The same was true only for 16.4 % of the other graduates with this degree. The situation for the graduates with a Diplom II was very similar. Twenty out of thirty-two engineers/natural scientists (62.5 %) took the subject 'Industrial Management', but only 25.0 % of the other graduates did so. The high priority of the engineers/natural scientists for the subject 'Economics of Production'/'Industrial Management' can be attributed to the fact that they

Diplom	apprenticeship/ practical training	specialization/supplemental subjects												
		Bank and Stock Market	Organization and Planning	Trade	Finance	Tax of Business Administration	Financial and Monetary Policy	Public Economics	Policy of Growth and Economics	Economics of Production/ Industrial Management	Business Law	Operations Research	Statistics	N
I	yes, management training	32.0		36.0		8.0	12.0			12.0				25
	yes, non-management training	11.8		23.5						64.7				17
	no	23.3		36.7		13.3	6.7	3.3		16.7				30
	all	23.6		33.3		8.3	6.9	1.4		26.4				72
II	yes, management training	36.4	1.5	40.9	28.8	31.8	28.8	4.5	1.5	21.2	1.5	1.5	1.5	66
	yes, non-management training	16.7	11.1	50.0	16.7	16.7	16.7	11.1	2.8	55.6	2.8			36
	no	31.4	1.4	32.9	38.6	34.3	18.6	5.7	2.9	30.0	2.9	1.4		70
	all	30.2	3.5	39.5	30.2	29.7	22.1	6.4	2.3	32.0	2.3	1.2	.6	172

Table 22: Specialization/Supplementary Subjects

(in percent)

wished to have more knowledge about business administration in the field of production. These graduates had the advantage of good mathematical knowledge because of their former studies. It was an exception for engineers/natural scientists to take other than the above mentioned subjects from the field of business administration.

3.5 Thesis

Most of the FeU graduates (81.9 %) had absolutely no problems in writing a thesis in their subject of choice, and further 9.5 % of the graduates had only some problems. In 8.6 % of cases the graduates had to switch to another subject because the desired subject was crowded. To do otherwise they would have had to accept a longer period of waiting to receive a topic for their thesis in their desired subject.

Two out of three graduates (64.3 %) have taken a topic from business administration for their thesis - 17.9 % one from business law, and a further 14.7 % in political economics. Only 2.4 % of the graduates decided to write a thesis in a quantitative subject ('Econometrics', 'Statistics').

65.2 % male graduates preferred to have written a thesis in business administration. On the other hand female graduates referred to write their thesis in business law (21.2 %; men 17.2 %) or in political economics (18.2 %; men 14.1 %).

Diplom	profession	specialization/supplemental subjects												
		Bank and Stock Market	Organization and Planning	Trade	Finance	Tax of Business Administration	Financial and Monetary Policy	Public Economics	Policy of Growth and Economics	Economics of Production/ Industrial Management	Business Law	Operations Research	Statistics	n
I	engineers/natural scientists			9.1		9.1				81.8				11
	others	27.9		37.7		8.2	8.2	1.6		16.4				61
	all	23.6		33.3		8.3	6.9	1.4		26.4				72
II	engineers/natural scientists	21.9	9.4	28.1	31.3	9.4	15.6	9.4	3.1	62.5	6.3	3.1		32
	others	32.1	2.1	42.1	30.0	34.3	23.6	5.7	2.1	25.0	1.4	.7	.7	140
	all	30.2	3.5	39.5	30.2	29.7	22.1	6.4	2.3	32.0	2.3	1.2	.6	172

Table 23: Specialization/Supplementary Subjects of Engineers/Natural Scientists and other Professions

(in percent)

Within business administration most of the graduates have written a thesis in the field of 'Trade'/'Marketing', and following that is: 'Finance'; 'Theory of Production and Investment'; and 'Tax and Inspector's Investigations'. None of the female graduates wrote a thesis in 'Organization and Planning'. Topics in the field of 'Theory of Production and Investment', 'Econometrics', and 'Statistics' were chosen very seldom by women. On the other hand, a lot of the women took a topic from 'Tax and Inspector's Investigations'. While the average of the women in the group of the graduates is 15.9 %, 35.7 % of these women graduates wrote a thesis in 'Tax and Inspector's Investigations'.

topic of the thesis in a subject of ...	female	male	all
Business Law	21.2	17.2	17.9
Econometrics/Statistics	1.5	2.6	2.4
Political Economics	18.2	14.1	14.7
Business Administration	59.1	65.2	64.3
accepted thesis from conventional university		.9	.7
N	67	347	414

Table 24: Topics of the Thesis

(in percent)

Up to the end of 1985, 438 students had written a thesis in the department of economics. Every tenth (9.8 %) student's thesis was rejected, they failed in the first attempt. Among those who failed in their thesis exams 11.1 % were males and 2.9 % were females. Diplom I students (11.7 %) failed more often than Diplom II students (8.8 %).

Students who wrote a thesis in business administration have the lowest failure rates (7.6 %), while students who chose a topic from political economics (15.7 %) or business law (13.2 %) were less successful.

In two out of three cases (65.1 %), students who did not pass the thesis tried a second time to complete the studies. In most of these cases students now passed the thesis but had to complete some other subjects.

Three students could not pass the thesis in their second attempt also. For this reason they could not complete their course of studies with a degree. Even after many years of studying at the FeU they have fallen short of achieving their longed-for goal.

Every third student (34.9 %) who did not pass the thesis did not try to repeat it a second time. Full-time students who wanted to earn a Diplom II degree have in most of cases (12 out of 14 students) written a thesis a second time in order to complete their studies.

One out of three students (35.7 %) who repeated the thesis, changed the examiner and/or the subject. The survey shows that there are only minor differences in the success of those students who did not change the examiner (16 out of 18 students passed the thesis the second time) or those who did (9 out of 10 students were successful in the repeat attempt).

On average the students took 14.5 months to complete the second thesis after failing in the first thesis. The part-time students needed 19.3 months to complete their second thesis, this was more than the average time. More than the other students, they obviously had to fight against the psychological shock of failure. They had more problems to come to a decison to write a new thesis.

Most of the graduates have been satisfied, in general, with the counselling they received for their thesis. Nearly every second graduate (43.9 %) stated that he/she found the counselling perfect and every third graduate (32.8 %) was satisfied to a great extent. Every eighth graduate (13.1 %) had some reservations about their counselling and another 9.8 % were not at all satisfied. The survey shows that the female graduates were less satisfied with counselling they received while writing the thesis (32.6 %) than was the case for the men (20.9 %). More relevant is the relationship between the grade of the thesis and the stated satisfaction with counselling. The better the grade of the thesis the more satisfied were the graduates.

Part II

1 Motivation for studying at the FernUniversität

1.1 Personal relevance

In the retrospective view studying at the FeU has had a very different relevance among the graduates. On the one hand some of the graduates studied for reasons of self-development and/or self-realization and on the other hand the graduates also had job/career goals. Using the graduates' statements an impression about the personal relevance of studying at a distance is presented below.

For the following graduates studying successfully at the FeU has developed their potential as a person:

- *To realize my study at the FeU was for me a cause of extreme importance. The past years of studying at a distance had another relevance for me than former years in my life. I had to get through many ups and downs, to cope with my self-knowledge, but at the end felt great satisfaction.*

- *Although I had the 'Abitur' (university entrance qualification) and the required occupational training for my educational level, I had always the feeling that I did not make the right use of my intellectual ability or did not develop my abilities adequately. My study and especially the successful completion have released me to a large extent from this trauma and gave me the feeling of self-development.*

- *My goal was to challenge and to prove myself. Furthermore, I really had the goal to get a university degree while keeping my job.*

- *At first I enjoyed the study in spite of very high burden that resulted from study and employment. Besides that it furnished proof for me that I could successfully cope with a variety of demands.*

- *To study at a distance has given me the self-evidence, that it is possible to complete an academic study at the age of 38 years while being employed.*

- *I am assuming, to be sure, that I have made up a - necessary - 'emancipation'. The study and the successful completion of the initial stage of studies helped me a lot to release personally.*

- *To realize my pleasure to learn; to know one's limitations; a piece of self-realization; reduction of complexes; to prove that I am as clever as others.*

- *I have learned a lot and now I am more self-assured in dealing with educated customers.*

- *Very important personal success (not only the 'Diplom', but also the acquisition of knowledge, in general), the feeling of my own worth increased very much, I have become more sure of myself in many areas of life.*

- *Goal was to prove to myself that I too was in the position to achieve something; to become more self-confident.*

- *Aside from gaining qualifications in the studied subjects it gave me boosting of my will due the permanent fight against dropping out; my motto was: 'The farest path starts with the first step'; and 'Look at the immediate next goal', because if you look for the whole path then you will never start!*

- *Intellectual challenge, to get results from intensive additional work for the duration of few years aside from the job to earn additional qualifications.*

For some graduates who dropped out earlier from another study, studying at a distance should be an indication that they too can successfully complete a course of study:

- *Self-realization and satisfaction of my ambition, to indicate that even after a previous drop-out I am in the position to complete another study successfully.*

- *This study gave me the chance to show that I am not to be a failure as a student although I was a drop-out in another study.*

- *To study at the FeU has had a very high relevance for me, because ten years ago I dropped out and now I completed my studies with success.*

Some graduates who previously earned university degrees studied at the FeU to supplement their education or to complete their former minor subject. The contents of their distance studies has an influence on their jobs.

Some of the students had a special feeling of success because they completed "a very difficult way" of studying. Partly they needed "a lot of will-power" to achieve their intended goal. Studying at a distance supported an "effective working style in comparison to studying at a conventional university". There also existed a "more intensive thirst for knowledge which lead sometimes to the obsession to complete the study under all circumstances because I began this". For some of the graduates studying at the FeU meant a "valuable addition" of their life, they were not able to do without it.

Some of the graduates have "realized a youthful dream". "This was the only possibility for me - the war did not allow me to study - to make up for what was lost in youth". With distance education they were able "to make up an academic study, which is usually not possible at this time in life". A motive for studying was also "to keep up with my younger colleagues who all had a university degree, and also to have 'equal rights' like other academics because with a Diplom I am also an academic".

Most of the graduates remember well the stress of studying at a distance. They had to make sacrifices in their family lives and leisure time. Only for some of the graduates studying at a distance was a "useful activity in the leisure time". At the end of the study "the stress was nearly unbearable", especially during

the time of writing the thesis. One graduate mentioned that the study "required very great effort, which I did not take into account at the beginning of my study. But if you have taken the first hurdle(s), then you simply continue". To pay a tribute to distance study was hard for the following graduate: "It was a very hard time for me, which brougth me a divorce in my private life and great advancement in my job. I did not know or I do not believe that I would do this again with my present experience".

Some other graduates considered studying at a distance more positively than studying at a conventional university. They said, that "distance education is an advantageous alternative to conventional studies". They had less often the experience of "frustration within the university". In "comparison to studying at a conventional university it was possible to work in a more effective way", because "ineffective lectures" did not exist here. For another graduate studying at the FeU meant "to study without constraints and without 'studying in line', that means to learn in my time, when I think it fits well for me and not in the following way: At eight o'clock begins the lecture!" Another advantage was to live "at the place of your own choice" while studying. The "advantage of the free time budgeting" opened "for me the chance to support the family financially". In addition there was the "possibility to alternate looking after our son with my wife who was also studying". One graduate said that "studying at a distance was for me the only way to study because I am physically handicapped".

For some married female graduates studying at a distance meant getting a first qualification for a job or having a useful occupation at home:

- *This was a chance for me to qualify for responsible employment in spite of my child.*

- *As a housewife and mother with a personal ability to self-study, studying at the FeU was the only chance for me to further my personal development.*

- *I began to study to do something in the evenings that is useful (with my small child I had to be at home, no baby-sitter, remote residential area).*

- *This was the only possible way of studying for me as a women with a family, without neglecting the family as would be the case while studying at a conventional university.*

For most of the graduates, the reasons for studying at the FeU were especially a chance to complete a study while working for a living, or to continue further education, or to increase the horizon of knowledge:

- *With my distance study I had the chance to earn professional knowledge while working, which also had relevance in my private life.*

- *The reason for studying at the FeU was to combine study with working regularly in my profession. This would be impossible while studying at a conventional university.*

- *The possibility to combine study and private life. A better qualification for a start into professional life.*

- *I did not receive BAFöG (a study grant) to study as a regular student. The study at the FeU gave me a better possibility to finance my studies by working at a job. Because you are relatively flexible in the time for working at the courses, you can accept a job without neglecting other things.*

- *The only possibility to earn an additional and more advanced 'Diplom'. To work in another field of work; which earlier was not anticipated, and for the final commitment to my preferred field of occupational work corrections were necessary which were only possible with a Diplom from the FeU.*

- *Continuing university study with the work would have been impossible for me if I had to do this in another way. It was otherwise difficult to cope with the challenges and problems of academic study especially while working for a living.*

Also, the extent of the relevance of distance studies for the graduates with regard to their job was very different. For some graduates, studying at the FeU was the "basis of my career because before I did not have occupational training"; other graduates expected "to better the chances in the labour market" or they hoped "to find employment with a 'Diplom'". For another part of the graduates the prospect of promotion was the most relevant aspect. The Diplom should "serve to improve the basis for a management position in business". Other graduates hoped that distance studies would open new "job prospects" to them, to better their "occupational position", to create the possibilty for promotion, and to increase their salary. In summary, the graduates wanted "to expedite the requirements of their occupational career".

Other graduates wanted "to fulfill the requirements in my profession to start one's own business (as tax consultant or accountant)". For another graduate the study has had no importance in the sense "of higher prestige (to the contrary: more disadvantages), but it was necessary as an occupational qualification (tax consultant) and financially attractive".

- *For personal reasons I had an unpretentious job, but I could use my time for studying at the FeU to continue my career after completing a higher level study.*

- *In the beginning I only wished to qualify better for my job. But after successfully completing the initial stage of studies I got a higher position in the civil service. Now they expected that I should complete with a 'Diplom'. The study was - while working for a living - a great burden, but I had a lot of fun and I earned a lot of knowledge.*

With studying economics, the engineers among the graduates would receive a more "theoretical basis for practical work as executive in industrial production". They had the aim "to be accepted in the former job in the field of economics and to create a good basis for further development". They wished to participate in discussions about business administration in their company because today it is necessary for engineers to have qualified "knowledge in the field of economics".

For another group of graduates, studying for a Diplom was, above all, the "requirement for a new professional future" in a new job because they planned to change their occupation.

1.2 Initial study goals

The graduates were asked to respond to 15 statements about their initial study goals. In the following section an account of only those answers on the 'five point' scale has been presented which responded as "very important". If a combination of responses "very important" and "fairly important" into one group was made then these would have been too strong levelling of the results.

Getting a degree was the dominant initial study goal for the graduates. For female graduates (74.4 %), this goal was rated more important than for male graduates (68.7 %). With respect to the kind of Diplom there are no significant differences, but in combination with other variables there are. For most of the Diplom I graduates (85.7 %) who had prior study experience at a university but without getting a degree, the degree of the FeU was a "very important" goal, but the same was true only for 45.5 % of those graduates with a former FHS degree or for 64.4 % of the graduates with a former university degree. Within the group of Diplom II graduates can be identified especially the following students, who said, that getting a degree was "very important" for them: students without former study experiences (76.4 %) and students, who did not earn a degree while they studied at a conventional university (77.4 %). Graduates with a FHS degree understated the importance because only 58.5 % of this group stated that the Diplom II was a "very important" study goal.

The other 14 statements about study goals were less important for the graduates. In the following section a differentiation of the goals of the graduates by gender and by a number of other vari-

study goals	employment while studying at a distance					
	yes		no		all	
	goal 'very important'	goal * exactly fulfilled	goal 'very important	goal * exactly fulfilled	goal 'very important'	goal * exactly fulfilled
Getting a degree	66.7	-	78.6	-	74.4	-
Developing my interests in a particular subject area	20.0	33.3	21.4	16.7	20.9	22.2
Gaining financial benefits from higher qualifications	13.3	50.0	3.6	0	7.0	33.3
Proving something to myself	20.0	66.7	42.9	66.7	34.9	66.7
Professional acceptance	40.0	50.0	25.0	14.3	30.2	30.8
Developing a new career	20.0	100	35.7	70.0	30.2	76.9
Widening my experience of life	13.3	50.0	17.9	40.0	16.3	42.9
Safegarding of my employment	6.7	0	0	-	2.3	0
Becoming more cultured	26.7	100	25.0	42.9	25.6	63.6
Improving my promotion prospects	33.3	40.0	21.4	16.7	25.6	27.3
Getting outside the limitations of my environment	20.0	66.7	39.3	63.6	32.6	64.3
Learning to study systematically	20.0	100	10.7	66.7	14.0	83.3
Catching up with or overtaking other members of my family	13.3	100	0	-	4.7	100
Learning things relevant for my work	20.0	66.7	25.0	28.6	23.3	40.0
Making up for lack of opportunity or missed opportunities in the past	33.3	100	42.9	75.0	39.5	82.4
n	15		28		43	

Table 25: Study Goals of Female Graduates

(in percent)

* Percentage of those graduates rating this goal "very important"

ables is presented. A deeper differentiation was possible only for the male graduates, as the total number of the female graduates was too small.

The goal of developing their potential as a person was most important to those women who were not employed while they studied at the FeU (42.9 %). In most of the cases these women were homemakers. Women who had a profession during their distance studies very seldom (20.0 %) held the goal of self development. For the women without a profession while studying, the feeling of self worth increased considerably after earning the degree, because with getting a degree (78.6 %) they also had the threefold aim to show that they were not only capable of housekeeping and bringing up children, but they also could successfully complete an academic program. The university degree is a requirement for these women for finding employment. In many cases these women are looking for a new career (35.7 %). Women who were employed did not state this as a study goal so often (20.0 %). However, these women did not feel they had to demonstrate that they were competitive in the job market. They stated less often that they had to make up for lack of opportunity or missed opportunities in the past to study at a university (33.3 % vs 42.9 % of the not employed women). The employed female graduates were looking for better acceptance in their profession (40.0 %) and they had the aim to improve their prospects of promotion (33.3 %). In the professional lives they found that there were many barriers to promotion in their careers if they do not have the formal university degree.

At present only a minority of the female graduates have reached their goal of promotion in their careers or of acceptance in their job. In most of the cases these women were employed while studying at a distance but this was the exception for the other female graduates.

In comparison to the female graduates the study goals for the male graduates differ significantly in some cases. But also partly significant differences exist within the group of the men, especially between Diplom I and Diplom II, and within this group the question of former study experience is important.

Graduates with Diplom I (39.1 %) as well as those with Diplom II (34.3 %) said that next to getting a degree it was "very important" to develop their potential as a person. However, improving their promotion prospects (Diplom I, 31.3 %; Diplom II, 34.3 %) was a high priority for every third male graduate. For men who either had their first study experience at the FeU or who continued a study program which they have interrupted at a conventional university, FHS or a similar institution, the goal of developing their potential as a person (self development) was more important than for graduates who had already completed a program of study at a conventional university or a FHS. Students without former study experience more often, than the other students, had the goal of improving their promotion prospects with a FeU degree (Diplom I 36.8 %; Diplom II 47.2 %). In total, every third male and every fourth female graduate had this goal. Men have realized this goal more often (every second) than the women (every fourth). It should be mentioned that the year of graduation is related to the realization of this goal. It seems as if expected promotion prospects

study goals	former study experiences											
	no		with university degree		university study without degree		with FHS degree		FHS study without degree		all	
	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*
Getting a degree	73.7	-	61.5	-	82.4	-	45.5	-	75.0	-	68.8	-
Developing my interests in a particular subject area	15.8	66.7	46.2	50.0	11.8	50.0	9.1	0	0	-	18.8	50.0
Gaining financial benefits from higher qualifications	21.1	75.0	7.7	100	0	-	9.1	0	25.0	100	10.9	71.4
Proving something to myself	42.1	75.0	46.2	83.3	41.2	85.7	36.4	75.0	0	-	39.1	80.0
Professional acceptance	15.8	33.3	7.7	0	5.9	0	27.3	33.3	25.0	0	14.1	22.2
Developing a new career	26.3	40.0	0	-	17.6	33.3	9.1	0	50.0	50.0	17.2	36.4
Widening my experience of life	10.5	50.0	23.1	66.7	5.9	0	0	-	25.0	0	10.9	42.9
Safegarding of my employment	10.5	50.0	0	-	0	-	0	-	0	-	3.1	50.0
Becoming more cultured	10.5	100	15.4	0	11.8	50.0	45.5	80.0	25.0	100	18.8	66.7
Improving my promotion prospects	36.8	52.9	23.1	66.7	35.3	0	27.3	66.7	25.0	100	31.3	45.0
Getting outside the limitations of my environment	36.8	52.9	7.7	100	29.4	60.0	9.1	100	50.0	50.0	25.0	62.5
Learning to study systematically	5.3	100	7.7	0	5.9	100	9.1	0	50.0	100	9.4	66.7
Catching up with or overtaking other members of my family	0	-	0	-	5.9	0	0	-	0	-	1.6	0
Learning things relevant for my work	26.3	40.0	0	-	35.3	16.7	27.3	100	25.0	100	23.4	46.7
Making up for lack of opportunity or missed opportunities in the past	31.6	100	15.4	0	29.4	80.0	27.3	66.7	25.0	0	26.6	70.6
n	19		13		17		11		4		64	

Table 26: Study Goals of Male Diplom I Graduates

(in percent)

* percentage of those graduates rating this goal "very important"

study goals	former study experiences											
	no		with university degree		university study without degree		with FHS degree		FHS study without degree		all	
	goal "very important"	goal exactly fulfilled*	goal "very important	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*	goal "very important"	goal * exactly fulfilled	goal "very important"	goal exactly fulfilled*	goal "very important"	goal exactly fulfilled*
Getting a degree	75.5	-	42.9	-	77.3	-	68.0	-	88.0	-	68.6	-
Developing my interests in a particular subject area	26.4	21.4	42.9	100	27.3	83.3	28.0	48.0	0	-	26.1	65.5
Gaining financial benefits from higher qualifications	34.0	44.4	14.3	0	36.4	0	16.0	50.0	60.0	33.3	27.7	38.2
Proving something to myself	43.4	69.6	28.6	50.0	45.5	60.0	20.0	90.0	40.0	100	36.3	72.3
Professional acceptance	28.3	26.7	0	-	18.2	0	16.0	25.0	20.0	0	20.6	21.6
Developing a new career	30.2	56.3	0	-	22.7	40.0	14.0	42.9	0	-	20.6	50.0
Widening my experience of life	15.1	62.5	14.3	0	4.5	100	16.0	87.5	0	-	13.1	72.2
Safegarding of my employment	0	-	0	-	0	-	0	-	0	-	0	-
Becoming more cultured	18.9	70.0	14.3	100	18.2	50.0	34.0	82.4	0	-	23.6	75.0
Improving my promotion prospects	47.2	60.0	28.6	50.0	22.7	40.0	26.0	46.2	40.0	50.0	36.3	53.2
Getting outside the limitations of my environment	24.5	61.5	0	-	13.6	33.3	20.0	50.0	0	-	19.8	53.8
Learning to study systematically	22.6	75.0	14.3	0	18.2	75.0	16.0	75.0	0	-	18.2	72.0
Catching up with or overtaking other members of my family	0	-	0	-	18.2	50.0	0	-	0	-	2.9	50.0
Learning things relevant for my work	20.8	27.3	14.3	100	18.2	50.0	20.0	40.0	20.0	0	19.7	37.0
Making up for lack of opportunity or missed opportunities in the past	26.4	71.4	14.3	100	36.4	62.5	32.0	81.3	40.0	100	29.9	75.6
n	53		7		22		50		5		137	

Table 27: Study Goals of Male Diplom II Graduates

(in percent)

* percentage of those graduates rating this goal "very important"

would either already be realized a short time after graduation or they would be realized to a much lesser extent than initially hoped for. Graduates without former study experience were promoted more often than were the other graduates. These students consist of not only those who have not had an employment while studying at a distance, but also those who in many cases were professional experienced men. Graduates who had no employment while studying do not differ from their fellow employed male students with respect to their goal of promotion and the extent to which that goal is realized.

The women graduates stated less often than the men that their goal was to make up for the lack of opportunity to study or missed opportunities in the past (Diplom I 26.6 %; Diplom II 29.9 %), because only every third male graduate had no former study experience before becoming a student at the FeU, while the same was true for every second female graduate. Not unexpectedly Diplom I graduates without former study experience (31.6 %) held this goal more often. On the other hand the same was true for Diplom II graduates who did not complete a former program of study at a conventional university (36.4 %). Obviously it was very important for this group to attain the degree.

For every fourth Diplom II graduate (27.7 %) it was "very important" to gain financial benefits as a result of their higher qualifications. The same was true only for every ninth graduate (10.9 %) with a Diplom I. Graduates who had studied at a FHS but had not got a degree there (44.4 %), and students who studied the first time when they began at the FeU (30.6 %) had more often than the average the expectation to gain a higher income with their de-

gree. Only 7.0 % of the female graduates had the same goal. Most Diplom I graduates who had the expectation of an increasing income after graduating said that this goal was already realized (five of seven); the same was true only for every third Diplom II graduate (34.2 %) with the same goal. It seems that the year of graduation is very important in regard to realizing this goal. Graduates who earned their degree by the end of 1982 had already reached their goal in 61.1 % of the cases, but the same was true only for 32.0 % of the graduates who got the degree in 1983 or later. For this reason it is, maybe, only a question of time, the other graduates will also realize this long-term goal. In section 4.8 the developent of income is discussed in more details.

24.1 % Diplom II and 18.8 % Diplom I graduates considered that their goal was developing their interest in a particular subject area. It is particularly interesting to note that 46.2 % Diplom I and 42.9 % Diplom II graduates who already had a university degree had this aim of developing interest in a particular subject area. These graduates obviously studied economics for professional purposes so they could use their new knowledge on the job. Most of these graduates think that their expectations in respect to their initial study gaols are already realized and their expectations of achieving competence in economics are fulfilled. For these graduates getting a degree was less important than for the other graduates. They did not absolutely need this degree because in the past they had already earned a univereity degree in another subject. For this reason they had a high priority for learning more about their subject area instead of being concerned with the more formal aspect of earning a degree.

Every fifth Diplom II graduate (20.4 %) was looking for higher professional acceptance with the help of the degree. This was especially true for students without former study experiences (28.3 %). Approximately the same proportion had the goal of changing their job because they would be getting outside the limitation of their professional environment (19.0 %). To develop a new career was the goal of 20.4 % Diplom II graduates, primarily this statement came from graduates without former study experiences (30.2 %). It is important to note here that, in general, the wish to change jobs was more relevant for women than for men. The men are less dissatisfied with their personal occupational situation than the women. Most of the women did not have a profession while studying at a distance and for this reason they studied to attain the requirements for more qualified employment than was the case in their original profession.

Relatively few of the male Diplom I (18.8 %) and Diplom II graduates (23.4 %) had the goal of becoming more cultured but it is especially noticeable that former graduates with a FHS degree gave this statement a very high value (Diplom I 45.5 %; Diplom II 34.0 %).

If the self development goals (with the exception of getting a degree) are put together in a single group and in another group those statements about the job/career goals, then the following picture is obtained: initially, the graduates of the FeU attached greater importance (57.0 %) to the goal of developing their potential as a person (self development) than to the goal of gaining better professional qualifications; 43.0 % had the opposite prior-

gender	former study experience	year of graduation					
		≤ 1982		> 1982		all	
		preferred goals ...					
		self development	job/career goals	self development	job/career goals	self development	job/career goals
female	no	54.5	45.5	60.0	40.0	57.1	42.9
	yes	85.7	14.3	50.0	50.0	66.7	33.3
	total	66.7	33.3	55.6	44.4	61.1	38.9
male	no	39.6	60.4	54.9	45.1	49.2	50.8
	yes	81.8	38.2	59.1	40.9	60.4	39.6
	total	54.7	45.3	57.3	42.7	56.1	43.9
all	no	44.3	55.7	55.9	44.1	51.2	48.8
	yes	64.7	35.3	57.9	42.1	61.2	38.8
	total	57.0	43.0	57.0	43.0	57.0	43.0

Table 28: Preference of Initial Study Goals

(in percent)

ty. These results are nearly identical to those found at the UKOU (Swift 1982). At the UKOU 56 % of all graduates preferred self development goals, and 44 % job/career goals.

If differentiation of the goals by gender, former study experience, and year of graduation is made (1982 and earlier; later than 1982), then there are some noticeable differences. Female graduates, in general, preferred self development goals (61.1 %) more often than male graduates (56.1 %). This relationship to former study experience is very strong. While three out of five (61.2 %) students with former study experience studied at the FeU mainly for reasons of self development, the same was true only for every second student (51.2 %) without prior study experience. The other part of the group preferred job/career goals (48.8 %). Male graduates without former study experience who earned their degree before the end of 1982 preferred job/career goals in 60.4 % of the cases but the same was true only for 38.2 % of the graduates with prior study experience.

Students who preferred self development goals as opposed to job/career goals in most of the cases achieved these goals (81.1 %). The same was true for only 45.6 % of those graduates who preferred job/career goals.

If exclusively the job/career goals are taken in consideration than it is found that female graduates more often (69.8 %) than men (64.7 %) agree with at least one of the seven items which list job/career factors as "very important" for their decision to study at the FeU (at the UKOU the reverse is true: women 66.0 %, men 75.0 % (Swift 1982)). On the other hand men more often (45.8 %)

		all	gender		field of activity			
			female	male	business	engineers/ natural scientists	others	without a profession
any concern for any job/career outcome	goal "very important"	65.6	69.8	64.7	61.9	67.7	68.5	66.1
	goal exactly fulfilled *	57.5	70.0	54.6	59.6	57.1	52.0	62.2
	UK Open University	72	66	75				
had concern for promotion, financial benefit or new occupation	goal "very important"	45.5	44.2	45.8	38.1	41.9	54.8	46.4
	goal exactly fulfilled *	51.4	63.2	48.9	62.5	38.5	45.0	53.8
	UK Open University	45	39	48				

Table 29: Job/Career Goals as Important at Entry

(in percent)

* Percentage of those graduates rating this goal "very important"

preferred items like 'promotion', 'financial benefits form higher qualifications', and/or 'a new job' than did women (44.2 %). Feale graduates of the FeU obviously more often have general job/career goals, while male graduates are much more orientated to specific promotion goals. It should be mentioned that there is a significant difference between the preferred goal and the realization of this goal. Female graduates who indicated at least one of the job/career goals as "very important" were concerned, more often than the male graduates, with at least one of these goals.

If a differentiation of the answers according to the field of activities of the graduates is made when they began to study at a distance, than it is remarkable, that the job/career goals are relatively independent of the field of activity. We get a different view, if we look exclusively at promotion, financial benefit or new occupation goals. Graduates who worked in the field of busiess had one of these goals significantly less often (38.1 %) than those graduates who worked in a non-business or non-engineering job. Most graduates (54.8 %) in this group preferred one of these goals when they began to study at a distance.

Most of the graduates (71.7 %) did not change their long-term goals while studying at the FeU. In this regard, the kind of Diplom was not very significant. Diplom I graduates (69.4 %) as well as Diplom II graduates (72.7 %) did not very often change their long-term goals. Every tenth graduate (10.2 %) said that his/her goals changed to a greater extent and every sixth graduate (18.0 %) stated changes to a smaller extent. The long-term goals were more often unchanged for the females (81.4 %) than for males (69.7 %). Especially the former FHS students, who got Diplom I

gender	former study experience	Diplom I				Diplom II				all			
		changing the long-term study goal while studying at a distance											
		yes, to a great extent	yes, to a small extent	no, not at all	n	yes, to a great extent	yes, to a small extent	no, not at all	n	yes, to a great extent	yes, to a small extent	no, not at all	n
female	no		66.7	33.3	3	10.5	5.3	84.2	19	9.1	13.6	77.3	22
	yes	20.0		80.0	5		12.5	87.5	16	4.8	9.5	85.7	21
	total	12.5	25.0	62.5	8	5.7	8.6	85.7	35	7.0	11.6	81.4	43
male	no	5.3	21.1	73.7	19	9.4	22.6	67.9	53	8.3	22.2	69.4	72
	yes	11.1	20.0	68.9	45	13.1	16.7	69.0	84	12.4	17.8	69.0	129
	total	9.4	20.3	70.3	64	11.7	19.0	68.6	137	10.9	19.4	69.7	201
all	no	4.5	27.3	68.2	22	9.7	18.1	72.2	72	8.5	20.2	71.3	94
	yes	12.0	18.0	70.0	50	11.0	16.0	73.0	100	11.3	16.7	72.0	150
	total	9.7	20.8	69.4	72	10.5	16.9	72.7	172	10.2	18.0	71.7	244

Table 30: Changing of the Long-term Goals while Studying

(in percent)

degree at the FeU changed their goals more than the average (46.7 %) during studying at a distance. They did not earn Diplom II degree as they had planned at the beginning of their studies.

As may be seen, some Diplom I graduates had to lower their original study goals. On the other hand a part of the Diplom II graduates assumed more ambitious goals during their study. They especially developed expectations to better their professional prospects. They wished to do a doctorate. In most of the cases the graduates changed their study goals during their main stage of studies.

In the following section some interesting comments of the graduates with respect to their changed goals are presented:

- *Before I began with my studies my special goal was to get a leading position in my profession. My awareness was limited only to this goal. During my studies I learned through empathy, strange thought structures. My horizon broadened through specific, systematic learning so far that I can now understand difficult and incomprehensible literature. My studies opened up a new horizon to me.*

- *Instead of striving to obtain a Diplom II degree my goal was lowered to obtaining a Diplom I degree; I had to change my goal because my superior authority did not allow me to take time off to complete the second seminar; for this reason it is impossible for me to do a doctorate.*

- *My study goal was Diplom II degree. For professional and family reasons I could only complete a Diplom I degree. Because the FeU changed the modus for the exams in business administration and political economy it is very difficult for me to reach my initial study goal.*

- *At the beginning my goal was to complete a Diplom II degree. But when I passed the first part of my study, it became more important for me to get a Diplom I degree.*

- *As my studies had reached the level of a Diplom I degree, I made the decision to start my own business but my goal was to complete my studies with this degree. To that time it had been my experience that it is very important to get a degree. You are an academic. Nobody will ask you where and how long you have studied. To get a Diplom II degree was no longer my goal because I needed my time for my own projects.*

- *Originally my interest was in research and development (I am an engineer).But in my experience the occupational possibilities and fields of activities are limited there, so that I had to redirect my thinking about the future into areas where technology and economics could be combined.*

- *First of all my long-term goal was exclusively to get a degree. During my studies I got a real interest in the subject economics. My new long-term goal became to work in a branch of an occupation which is dominated by business (instead of exclusively technique).*

- *Surprisingly good study results led me to the decision to continue my studies, maybe with the goal to do a doctorate study.*

1.3 Re-orientation through studying at a distance

Like the UKOU, the FeU is also a 'transformer' (Swift 1982 , p. 3) - just as conventional universities. During their studies many students found new perspectives and different ideas. Nearly every second graduate (43.0 %) stated that they found "wider perspectives, new horizons'" and this is more often relevant for graduates with a Diplom II (45.3 %) than for those with a Diplom I degree (37.5 %). Former male university students especially who had completed their studies at the FeU with a Diplom II degree said they broadened their perspectives (55.2 %) and the same was true for male students without former study experiences (47.2 %). Nearly every third graduate (34.8 %) was more self-confident after completing his/her distance studies. This was especially true for former students of a conventional university (41.5 %) or a FHS who did not complete their studies with a degree.

Every fourth graduate (25.0 %) has developed to a greater extent "different perspectives of life" after graduating. This is true for more than the average for students without former study experiences (29.8 %), and especially the women (36.4 %). These women obviously see new chances to leave the limitations of their family/home with the qualifications they have earned at the FeU. This is confirmed by the following: female Diplom II graduates (31.6 %) said that they are now much more in a position to take the initia-

personal changes	gender	former study experience	Diplom I		Diplom II		all	
			to a great extent	if anything the opposite	to a great extent	if anything the opposite	to a great extent	if anything the opposite
acquired new horizons, new goals	female	no	0	0	52.6	0	45.5	0
		yes, university	20.0	0	40.0	0	33.3	0
		yes, FHS			50.0	0	50.0	0
		all	12.5	0	48.6	0	41.9	0
	male	no	52.6	0	47.1	1.9	47.2	1.4
		yes, university	26.7	0	55.2	0	40.7	0
		yes, FHS	53.3	0	38.2	0	41.4	0
		all	40.6	0	44.5	.7	43.3	.5
	all	no	45.5	0	47.2	1.4	46.8	1.1
		yes, university	25.7	0	51.3	0	39.2	0
		yes, FHS	53.3	0	39.3	0	42.1	0
		all	37.5	0	45.3	.6	43.0	.4
more self-confident	female	no	66.7	0	26.3	0	31.8	0
		yes, university	20.0	0	30.0	0	26.7	0
		yes, FHS			50.0	0	50.0	0
		all	37.5	0	31.4	0	32.6	0
	male	no	47.4	0	35.8	1.9	38.9	1.4
		yes, university	33.3	0	44.8	0	39.0	0
		yes, FHS	26.7	0	29.1	1.8	28.6	1.4
		all	35.9	0	35.0	1.5	35.3	1.0
	all	no	50.0	0	33.3	1.4	37.2	1.1
		yes, university	31.4	0	41.0	0	36.5	0
		yes, FHS	26.7	0	31.1	1.6	30.3	1.3
		all	36.1	0	34.3	1.2	34.8	.8

Table 31: Personal Changes while Studying at the FernUniversität

(in percent)

Table continues ...

Table continues ...

personal changes	gender	former study experience	Diplom I		Diplom II		all	
			to a great extent	if anything the opposite	to a great extent	if anything the opposite	to a great extent	if anything the opposite
acquired a new way of looking at things, a different perspective on life	female	no	33.3	0	36.8	0	36.4	0
		yes, university	20.0	0	10.0	0	13.3	0
		yes, FHS			33.3	0	33.3	0
		all	25.0	0	28.6	0	27.9	0
	male	no	21.6	0	26.4	0	27.8	0
		yes, university	20.0	0	27.6	3.4	23.7	1.7
		yes, FHS	13.3	0	23.6	0	21.4	0
		all	21.9	0	25.5	.7	24.4	.5
	all	no	31.8	0	29.2	0	29.8	0
		yes, university	20.0	0	23.1	2.6	21.6	1.4
		yes, FHS	13.3	0	24.6	0	22.4	0
		all	22.2	0	26.2	.6	25.0	.4
become more restless, irretable or overactive	female	no	0	33.3	0	15.8	0	18.2
		yes, university	0	0	0	20.0	0	13.3
		yes, FHS			0	66.7	0	66.7
		all	0	12.5	0	25.7	0	23.3
	male	no	15.8	21.1	7.5	20.8	9.7	20.8
		yes, university	10.0	26.7	0	31.0	5.1	28.8
		yes, FHS	0	20.0	5.5	29.1	4.3	27.1
		all	9.4	23.4	5.1	26.3	6.5	25.4
	all	no	13.6	22.7	5.6	19.4	7.4	20.2
		yes, university	8.6	22.9	0	28.2	4.1	25.7
		yes, FHS	0	20.0	4.9	32.8	3.9	30.3
		all	8.3	22.2	4.1	26.2	5.3	25.0

Table 31: Personal Changes while Studying at the FernUniversität

(in percent)

Table continues ...

Table continues ...

personal changes	gender	former study experience	Diplom I		Diplom II		all	
			to a great extent	if anything the opposite	to a great extent	if anything the opposite	to a great extent	if anything the opposite
become much more a person who can take the initiative where necessary	female	no	0	0	31.6	0	27.3	0
		yes, university	0	0	10.0	0	6.7	0
		yes, FHS			0	0	0	0
		all	0	0	20.0	0	16.3	0
	male	no	26.3	0	24.5	0	25.0	0
		yes, university	13.3	0	24.1	0	18.6	0
		yes, FHS	13.3	0	20.0	0	18.6	0
		all	17.2	0	22.6	0	20.9	0
	all	no	22.7	0	26.4	0	25.5	0
		yes, university	11.4	0	20.5	0	16.2	0
		yes, FHS	13.3	0	18.0	0	17.1	0
		all	15.3	0	22.1	0	20.1	0
become dissatisfied with things in my life that I cannot really change	female	no	0	0	5.3	10.5	4.5	9.1
		yes, university	20.0	0	20.0			0
		yes, FHS			0	0	0	0
		all	12.5	0	8.6	5.7	9.3	4.7
	male	no	10.5	5.3	9.4	17.0	9.7	13.9
		yes, university	16.7	20.0	0	24.1	8.5	22.0
		yes, FHS	0	26.7	9.1	10.9	7.1	14.3
		all	10.9	17.2	7.3	16.1	8.5	16.4
	all	no	9.1	4.5	8.3	15.3	8.5	12.8
		yes, university	17.1	17.1	5.1	17.9	10.8	17.6
		yes, FHS	0	26.7	8.2	9.8	6.6	13.2
		all	11.1	15.3	7.6	14.0	8.6	14.3

Table 31: Personal Changes while Studying at the FernUniversität

(in percent)

tive where necesarry. Furthermore, none of the female Diplom I graduates was in this position, while on the other hand every fifth man (20.9 %) can take the initiative where necesarry.

After completing their studies 25.0 % of the graduates are now more quiet, less irritable or less overactive. But on the other hand every twentieth graduate (5.3 %) feels that he/she is more restless, irritable or overactive than while studying at a distance. In general, it can be said that after earning a degree from the FeU the graduates became more balanced persons (12.7 %) than is the case for the reverse (7.8 %).

Improved ability to communicate with other persons is more pronounced for the male (13.9 %) than for the female graduates (4.7 %). It looks like than women did not have the same possibilities as the men to communicate with persons of similar educational background. Furthermore, it is worth mentioning that on the other hand more women (7.0 %) said that they lost the ability to communicate with others.

The male graduates especially (16.4 %) have learned during their studies not to be dissatisfied any longer with things in their lives they cannot really change. Has studying at a distance made these graduates frustrated or conformist humans, because they learned on the basis of their study experience that a fight for change is without real worth, and it is better to go easy on other things in live? The graduates of the FeU think very economically and therefore they check very carefully the relation of the rate

of return and the energy which they have to put into activities. The result is that they prefer things that take their course, to be more above things, and to be more serene.

It should be mentioned that as a result of studying at a distance 4.9 % of the graduates became cut off from friends that they had before they began to study. In 12.3 % of cases the existing friendships are now more intensive, and 6.1 % of the graduates made new friends. These graduates now have a more content social life than before they began to study at a distance. But the reverse is true for 11.4 % of the male graduates.

2 Effect of studying at a distance on different areas of life

Using five statements the graduates were asked about the effects of studying at a distance on different areas of their lives. The greatest effects were on the graduates themselves, because 58.6 % agreed with this statement. They stated clearly that their studies had either a great effect on their jobs/careers (43.0 %) or on their family/family life (40.6 %). For every fourth graduate (27.0 %), social life and relations with others were greatly affacted, but only every seventh graduate (14.3 %) saw a great effect on his/her role as a member of society.

For which groups of graduates was there a significantly greater effect on different areas of life? To adress this question all the five statements have been evaluated in relation to the kind of Diplom, the gender, the age group at graduation (younger than 32 year or 32 year and older), the occupational situation while studying, marital status at the beginning of studying and former study experience. We think that these variables have a great effect on this question, so it is possible to classify the graduates according to these characteristics.

2.1 As a person

Older graduates (32 year and older at graduation) have been affected as a person to a significantly (Chi square = 4.36, DF =1, sig. = .0326) greater extent (64.9 %) as they studied at a distance than the younger (younger than 32 year old) graduates (51.3 %). For the older graduates, study more often had the func-

tion of instilling self-confidence because they started to study at an age when they did not belong to the typical student generation. On the other hand for the younger graduates studying was nothing special. There was indeed a clear effect in this respect but not as great as for the older graduates.

all
age group
employment while studying
former study experience
n = 27 no 44.4 %
n = 53 yes 45.3 %
n = 26 yes 46.2 %
n = 113 < 32 51.3 %
n = 28 no 60.7 %
n = 60 no 56.7 %
n = 32 yes 53.1 %
n = 244
58.6 %
n = 27 no 55.6 %
n = 104 yes 59.6 %
n = 77 yes 61.0 %
n = 131 ≥ 32 64.9 %
n = 12 no 100 %
n = 27 no 85.2 %
n = 15 yes 73.3 %

Figure 6: Greatest Effect of Studying at a Distance on the Student as a Person

In total there are no significant gender specific differences (men 59.2 %; women 55.8 %). Also the question of employment while studying, in general, had no significant effect on the student as a person. But if we look at the data more deeply then differences do indeed exist. Studying at a distance had a very great effect on the small group of the older Diplom II graduates who had no employment while studying because 85.2 % of these graduates - in most of the cases these are women - voted for this statement. It seems that successful graduation was very important for the personal development of older women who had no job while studying at a distance because in most of the cases these women had to live the life of a homemaker and mother and with their studies they experienced a totally different world. The effect of their distance studies was to cause a first step out of their home environment.

The 32 year or older female graduates, who were not employed during their studies, saw a great effect on themselves as a person, the same was true only for a few employed younger women without former study experience (14.3 %). The younger women were obviously very much engaged in their profession, so that studying at a distance had only a minor effect on their personal development.

For the male graduates, there was no significant difference at all on the question of whether studying at a distance had an effect on them as a person. For this reason it can be said that all men are effected very similarly by their distance studies.

2.2 Family/family life

Before presenting an evaluation of the effect of study at the FeU on the family/family life of the graduates, an overview of the marital status of the FeU graduates is given.

At the beginning of their studies two out of three (64.3 %) graduates were already married. Gender specific differences in this case are not significant. On the other hand differences exist when we look at the kind of Diplom. Male Diplom I graduates (78.1 %) were more often married than Diplom II graduate (56.9 %). At the beginning of their studies 1.6 % of the graduates were divorced.

After completing the study the proportion of single students - especially men - is much lower. Only 16.8 % of the graduates are single, but 80.3 % are now married. Amongst Diplom I graduates the percentage of married students (87.5 %) is the highest (Diplom I 71.5 %). From the 244 respondents of the investigation, eight graduates were divorced while studying but three of these cases remarried. The data indicates that studying at a distance disturbed family life only in some cases to the extent that a divorce was the consequence. Getting divorced was perhaps in some of the cases unrelated of the distance studies. This is only a speculation as no facts for confirming this hypothesis have been collected in this study.

One out of three (31.0 %) married female graduate was childless at the start of her studies; every second (48.3 %) had one child. The male married graduates more often were childless (42.2 %), and less often had one child (28.9 %). In contrast to the women

Diplom	marital status		gender																	
			female									male							
			all		... number of children							all		... number of children						
			%	n	0	1	2	3	4	5	6	%	n	0	1	2	3	4	5	6
I	at the start of studying at a distance	bachelor	17.5	3	100							20.3	13	100						
		married	62.5	5	20.0	40.0	20.0	20.0				78.1	50	42.0	28.0	22.0	8.0			
		divorced										1.6	1				100			
	graduation	bachelor	25.0	2	100							7.8	5	100						
		married	75.0	6	16.7	50.0		33.3				89.1	57	29.8	31.6	26.3	12.3			
		divorced										3.1	2	100						
II	at the start of studying at a distance	bachelor	25.7	9	100							42.3	58	98.3	1.8					
		married	68.6	24	33.3	50.0	12.5			4.2		56.9	78	42.3	29.5	23.1	1.3	2.6		1.3
		divorced	5.7	2	50.0	50.0						.7	1	100						
	graduation	bachelor	17.1	6	100							20.4	28	96.4	3.6					
		married	74.3	26	42.3	26.9	23.1	3.9		3.9		78.1	107	36.5	24.3	32.7	3.7	1.9		.9
		divorced	5.7	2		100						1.5	2	50.0	50.0					
		widowed	2.9	1	100															
all	at the start of studying at a distance	bachelor	27.9	12	100							35.3	71	98.6	1.4					
		married	67.4	29	31.0	48.3	13.8	3.5		3.5		63.7	128	42.2	28.9	22.7	3.9	1.6		.8
		divorced	4.7	2	50.0	50.0						1.0	2	50.0			50.0			
	graduation	bachelor	18.6	8	100							16.4	33	97.0	3.0					
		married	74.4	32	37.5	31.3	18.8	9.4		3.1		81.6	164	34.2	26.8	30.5	6.7	1.2		.6
		divorced	4.7	2		100						2.0	4	75.0	25.0					
		widowed	2.3	1	100															

Table 32: Marital Status and Number of Children of Graduates

(in percent)

(13.8 %), in 22.7 % of the cases the men had two children. When the students graduated the situation changed. For the male students who were singles at the beginning of their study every second one of them married while studying at the FeU. For this reason it is not surprising that the proportion of men who were childless dropped to 34.2 %. On the other hand, the portion of married women who were childless increased to 37.5 %. The percentage of both male and female graduates who had two or three children at the end of their studies increased.

The effect of distance studies on the graduates' families or family life (40.6 %) is even less clear than the effect on the students as persons, although investigations in the past about active students or drop outs (Bartels et al 1984, Bartels 1985) have shown that there are a lot of problems which make it so difficult to study at a distance successfully. Employment while studying had the greatest effect on family/family life, especially when the age of the student is considered (Chi square = 5.11, DF = 1, sig. = .0238). While the younger married graduates (48.9 %) saw a greater effect on their family life than the unmarried graduates (32.4 %) - it should be mentioned that the unemployed singles saw no effect (15.2 %) - these effects were significant for the older graduates who were unmarried while studying (52.6 %). Family life was affected for the married graduates only when they had no job (50.0 %). Family life was affected more for the younger graduates because they were at the age to start a family, but the same was not true for the older graduates.

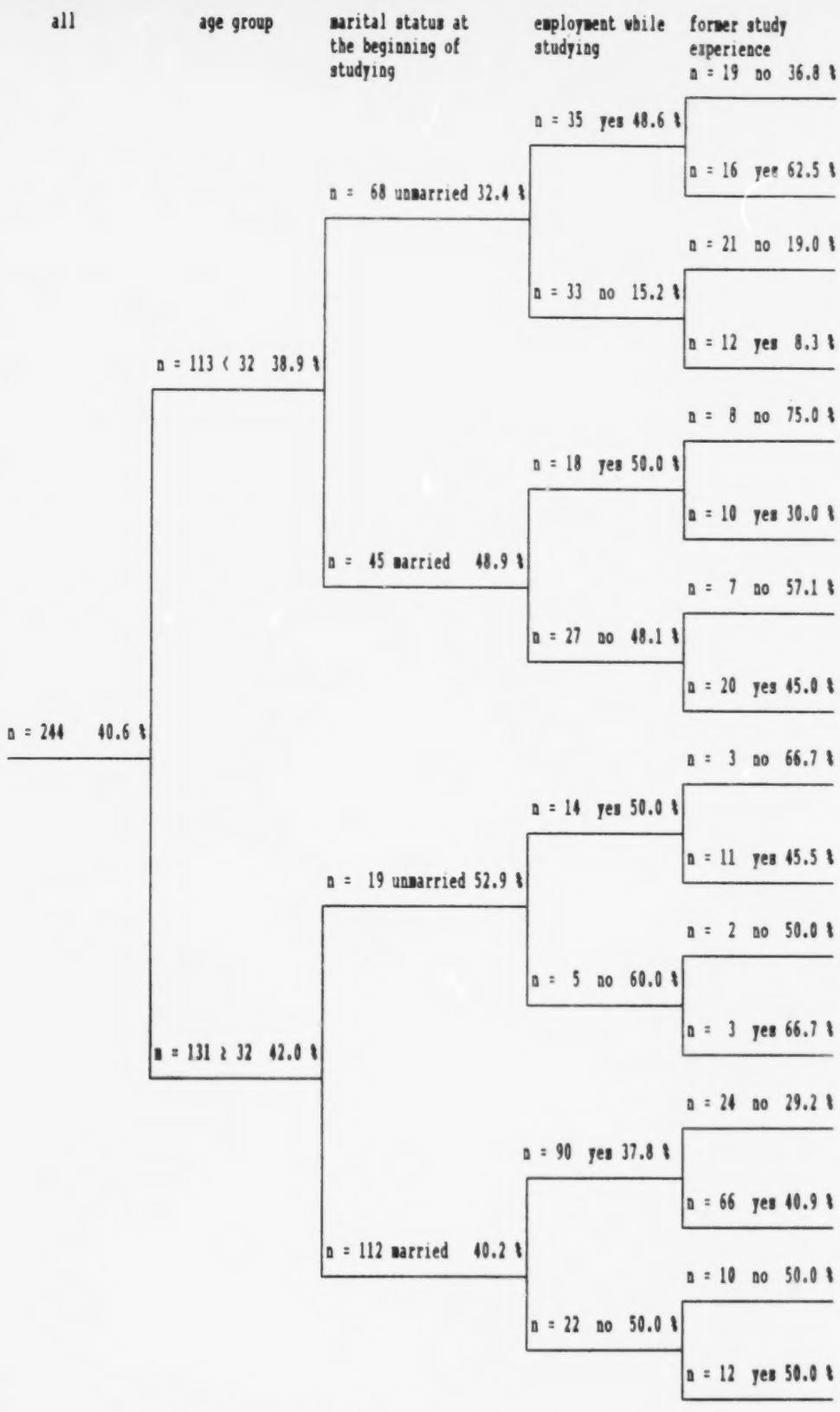
all
age group
marital status at the beginning of studying
employment while studying
former study experience
n = 244 40.6 %
n = 113 < 32 38.9 %
n = 68 unmarried 32.4 %
n = 35 yes 48.6 %
n = 19 no 36.8 %
n = 16 yes 62.5 %
n = 33 no 15.2 %
n = 21 no 19.0 %
n = 12 yes 8.3 %
n = 45 married 48.9 %
n = 18 yes 50.0 %
n = 8 no 75.0 %
n = 10 yes 30.0 %
n = 27 no 48.1 %
n = 7 no 57.1 %
n = 20 yes 45.0 %
n = 131 ≥ 32 42.0 %
n = 19 unmarried 52.9 %
n = 14 yes 50.0 %
n = 3 no 66.7 %
n = 11 yes 45.5 %
n = 5 no 60.0 %
n = 2 no 50.0 %
n = 3 yes 66.7 %
n = 112 married 40.2 %
n = 90 yes 37.8 %
n = 24 no 29.2 %
n = 66 yes 40.9 %
n = 22 no 50.0 %
n = 10 no 50.0 %
n = 12 yes 50.0 %

Figure 7: Effect of Studying at a Distance on Family/Family Life

Female married graduates with occupations less often saw a great effect on their family lives while studying (28.6 %) than did their male fellow students (40.6 %). The effect was more relevant for the married female graduates without employment (50.0 %) because in 68.2 % of the cases they had to look after their children and for understandable reasons they were very much affected (66.7 %) by the triple stress caused by housekeeping, bringing up children and studying. The effect for the unmarried females was also more than the average (75.0 %) and for male graduates (43.9 %) who were employed during their studies. These mainly younger graduates found it difficult to build up a partnership while they studied and were employed. On the other hand, family life was not at all affected in the group of the unmarried graduates without employment. Obviously they had enough time to make friends because every second graduate who was unmarried at the start of their studies got married in the course of their distance studies.

The members of the families - probably the children being raised in the home but also, in some cases live in domestic help - of the not employed women very often (64.3 %) took on some commitments if the study burden was very high. The same was true less often for most of the childless employed women, because only in 46.7 % of the cases the partner took on commitments. It looks as though the families of the unemployed women studying at a distance acted more on the principle of the division of labour, because the families did not wish to block the goal of completing the study with success. The situation for the male graduates was very similar to the situation of employed women. In only 42.3 % of the cases the family took on some commitments. But on the other hand, these stu-

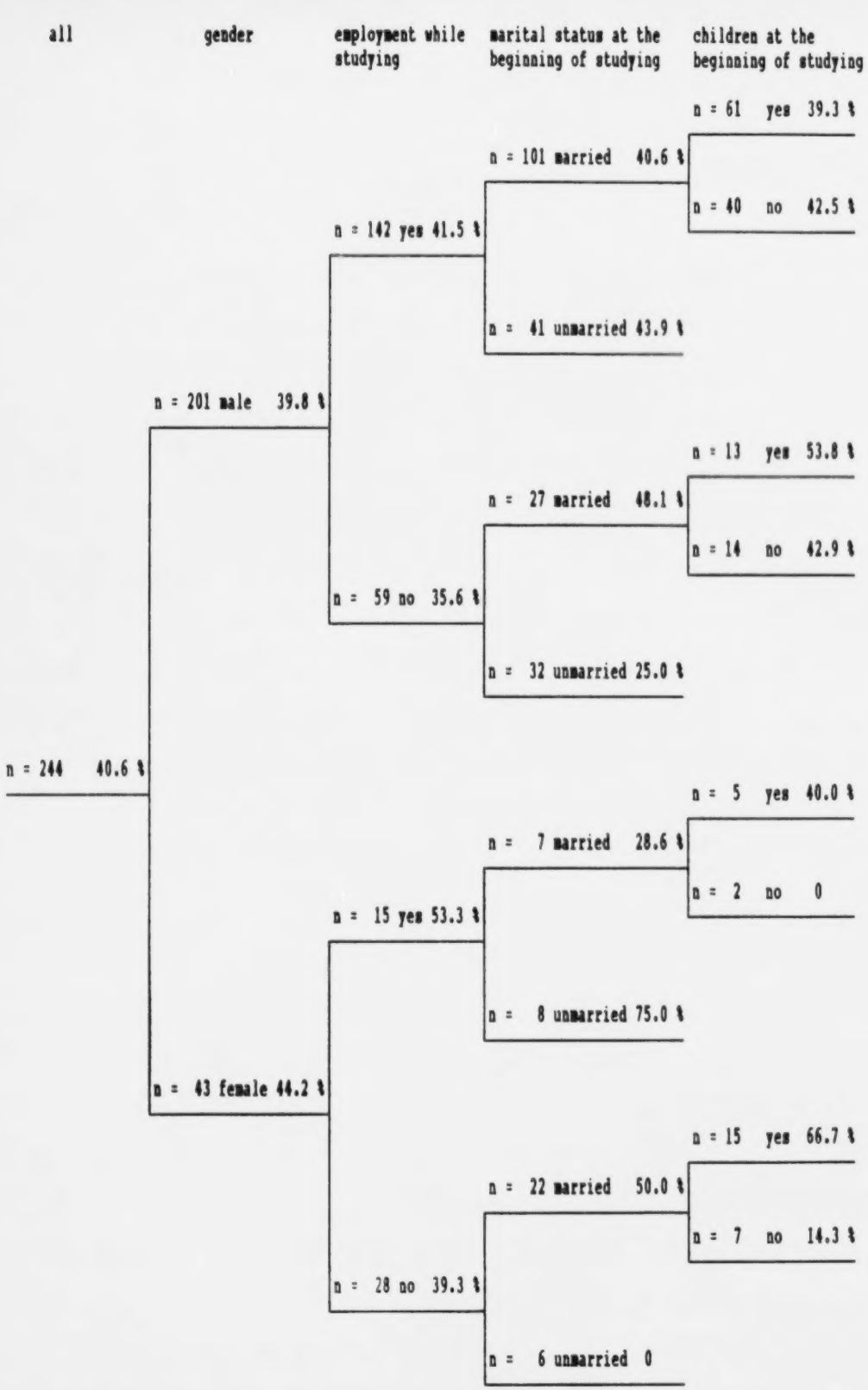
all
gender
employment while studying
marital status at the beginning of studying
children at the beginning of studying
n = 244 40.6 %
n = 201 male 39.8 %
n = 142 yes 41.5 %
n = 101 married 40.6 %
n = 61 yes 39.3 %
n = 40 no 42.5 %
n = 41 unmarried 43.9 %
n = 59 no 35.6 %
n = 27 married 48.1 %
n = 13 yes 53.8 %
n = 14 no 42.9 %
n = 32 unmarried 25.0 %
n = 43 female 44.2 %
n = 15 yes 53.3 %
n = 7 married 28.6 %
n = 5 yes 40.0 %
n = 2 no 0
n = 8 unmarried 75.0 %
n = 28 no 39.3 %
n = 22 married 50.0 %
n = 15 yes 66.7 %
n = 7 no 14.3 %
n = 6 unmarried 0

Figure 8: Effect of Studying at a Distance on Family/Family Life

to take on commitments while studying at a distance	gender								
	female			male			all		
	employment while studying								
	yes	no	all	yes	no	all	yes	no	all
had the opportunity to concentrate fully on studying at a distance	6.7	21.4	16.3	43.7	50.9	45.8	40.1	41.4	40.6
if the study burden was very high the family took on some commitments	46.7	64.3	58.1	46.5	32.2	42.3	46.5	42.5	45.1
non-taking off some of the load in the household	33.3	17.9	23.3	12.0	30.5	17.4	14.0	26.4	18.4
family made some manuell activities while studying	0	17.9	11.6	25.4	25.4	25.4	22.9	23.0	23.0
in the case of problems exists the opportunity to discuss the study contents with a partner	53.3	39.3	44.2	14.1	15.3	14.4	17.8	23.0	19.7
n	15	28	43	142	59	201	157	87	244

Table 33: Taking on Commitments while Studying

(in percent)

dents very often (45.8 %) had the opportunity to concentrate wholly on studying at a distance. This was true for only a few of the women (16.3 %). The differences between the gender are highly significant (Chi square = 12.78, DF = 1, sig. = .000). Every sixth male (17.4 %) but every fourth female graduate (23.3 %) did not have some of their load relieved while studying. Male graduates (14.4 %) significantly less often (Chi square = 19.85, DF = 1, sig. = .000) than the female graduates (44.2), had an opportunity to discuss the course content with their partner when there were problems. The successful female graduates obviously had very

good external conditions for their studies in economics because their partner had so much background to give them assistance. For male graduates assistance from their partner was very rare.

2.3 Social life

Every fourth graduate (27.0 %) indicated that studying at a distance had a great effect on his/her social life and relations with others. No significant difference exists between the sexes. On the other hand kind of Diplom, age, employment while studying, and also former study experiences were important factors.

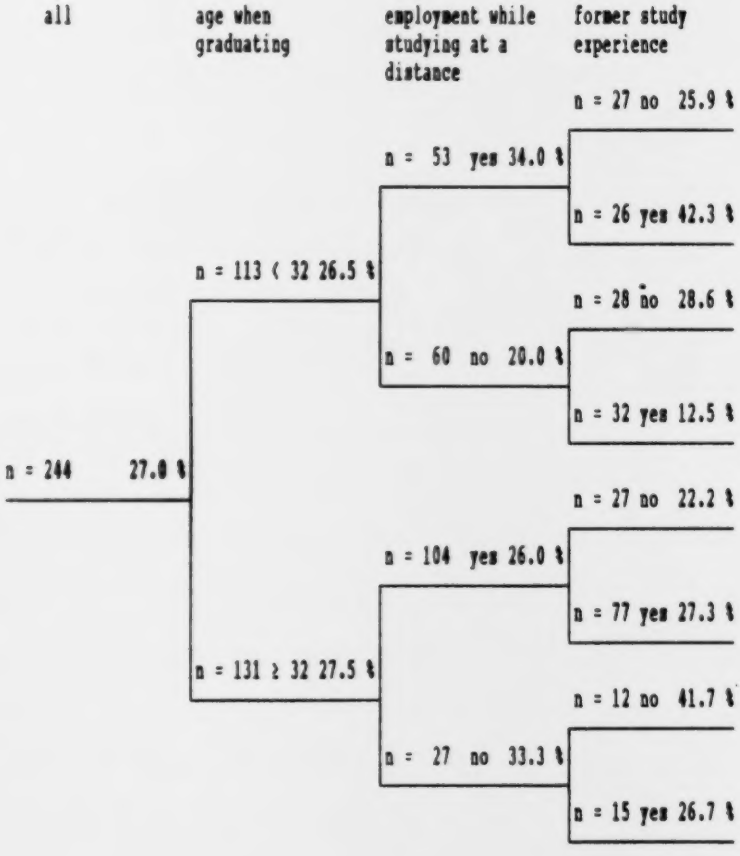
all
age when graduating
employment while studying at a distance
former study experience
n = 27 no 25.9 %
n = 53 yes 34.0 %
n = 26 yes 42.3 %
n = 113 < 32 26.5 %
n = 28 no 28.6 %
n = 60 no 20.0 %
n = 32 yes 12.5 %
n = 244 27.0 %
n = 27 no 22.2 %
n = 104 yes 26.0 %
n = 77 yes 27.3 %
n = 131 ≥ 32 27.5 %
n = 12 no 41.7 %
n = 27 no 33.3 %
n = 15 yes 26.7 %

Figure 9: Effect of Studying at a Distance on Social Life and Relations with Others

If the graduates are compared by the kind of degree earned then a significant difference exists (Chi square = 4.66, DF = 1, sig. = .0309) between type of Diplom, age and previous study experience. The younger than 32 year old Diplom I graduates with previous study experiences are much more affected in their social life (52.6 %) than Diplom II graduates (12.8 %). On the other hand Diplom II graduates who were 32 or older (30.6 %) said that their social lives were affected by their distance studies. Previous study experiences had no significant influence for the older graduates.

The age of the students and employment status while studying for the male Diplom II graduates especially influenced their responses to the question of the effect of distance study on their social lives. In only 13.9 % of the cases young graduates who were not employed during studying said that their social life changed since they got a degree of the FeU.

2.4 Member of society

Since graduation, every seventh graduate (14.3 %) said that he/she now has higher status as a member of society. Women more often have this feeling (18.6 %) than men (13.4 %), but the difference is not significant. What is significant is the prestige for Diplom II graduates who were employed while studying and for students with previous study experiences. Diplom II graduates with previous study experience and employment while studying now had a higher reputation in only a few cases (9.2 %) - they had already achieved their status when they completed their first university study - the same was true for nearly every fourth other graduate (22.9 %).

2.5 Job/career

As mentioned earlier, distance study had, in general, the greatest effect on the job/career of the graduates (43.0 %). No other external area of life was affected to such an important extent by the study. The stated importance of the effects of study at a distance were most significant according to employment status while studying and age at graduation - both separately and also jointly. From all the relationships that are significant, only those that are most conspicuous are presented below.

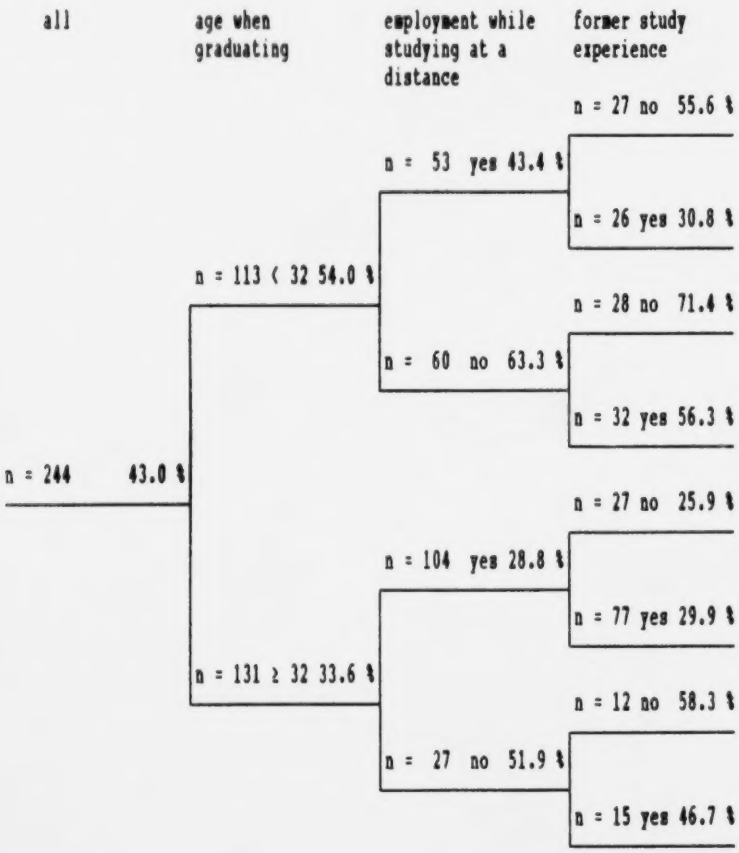
all
age when graduating
employment while studying at a distance
former study experience
n = 244 43.0 %
n = 113 (32 54.0 %
n = 53 yes 43.4 %
n = 27 no 55.6 %
n = 26 yes 30.8 %
n = 60 no 63.3 %
n = 28 no 71.4 %
n = 32 yes 56.3 %
n = 131 ≥ 32 33.6 %
n = 104 yes 28.8 %
n = 27 no 25.9 %
n = 77 yes 29.9 %
n = 27 no 51.9 %
n = 12 no 58.3 %
n = 15 yes 46.7 %

Figure 10: Effect of Studying at a Distance on Job/Career

Younger graduates (54.0 %) respond significantly differently (Chi square = 10.13, DF = 1, sig. = .0015) from the older graduates (33.6 %) with respect to the effect of their study on their job/ career. It seems that the older graduates less often profit in their jobs after completing their studies than do the younger graduates. But employment status while studying (Chi square = 15.01, DF = 1, sig. = .0001) and previous study experience (Chi square = 5.11, DF = 1, sig. = .0237) are also significant in this respect. Graduates who were not employed while studying reported more benefit (59.8 %) than the employed graduates (33.8 %) and students without previous study experience reported more benefit (52.1 %) than those with previous study (37.3 %).

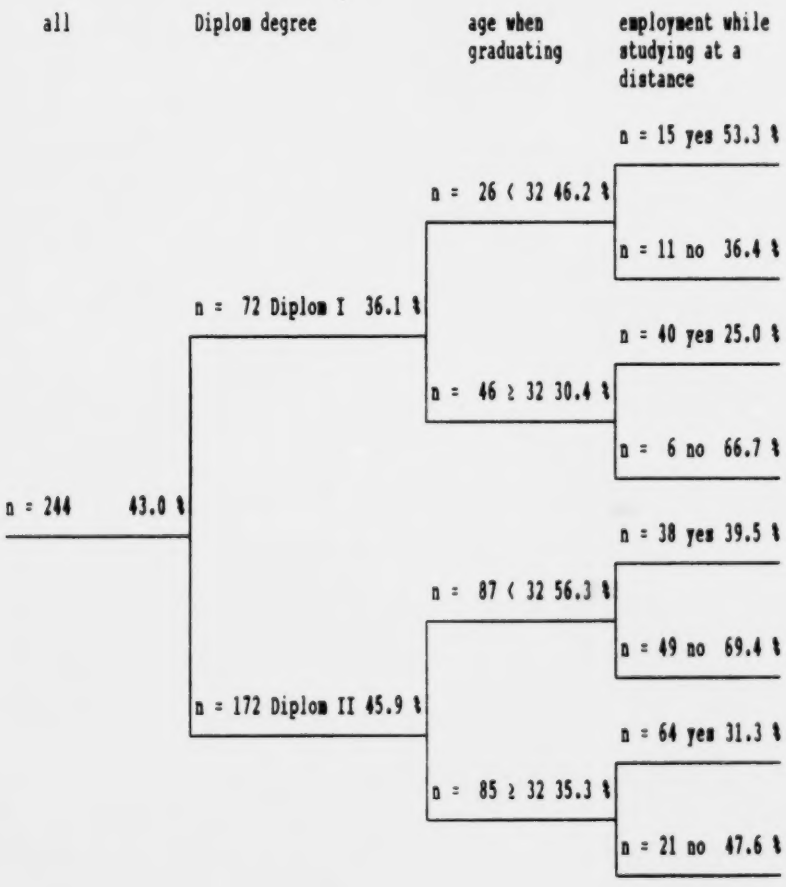
all
Diplom degree
age when graduating
employment while studying at a distance
n = 244 43.0 %
n = 72 Diplom I 36.1 %
n = 172 Diplom II 45.9 %
n = 26 < 32 46.2 %
n = 46 ≥ 32 30.4 %
n = 87 < 32 56.3 %
n = 85 ≥ 32 35.3 %
n = 15 yes 53.3 %
n = 11 no 36.4 %
n = 40 yes 25.0 %
n = 6 no 66.7 %
n = 38 yes 39.5 %
n = 49 no 69.4 %
n = 64 yes 31.3 %
n = 21 no 47.6 %

Figure 11: Effect of Studying at a Distance on Job/Career

It is instructive to look at the gender specific differences of Diplom II graduates who were employed while studying at a disance. In 58.3 % of the cases, female graduates who were employed while they studied said that they gained in their job/career after completing their studies at the FeU. The same was true only for every second woman (47.8 %) among those who were not employed. For the male graduates the reverse is true. The most benefit on job/career was reported for unemployed men (70.2 %), and less often for employed men (31.1 %). The difference is highly significant (Chi square = 17.78, DF 0 1, sig. = .0001).

For the male employed graduates older than 31 years the effect in their job at present was very low (27.6 %), but on the other hand 40.9 % of the younger graduates took advantage of their degrees. For the not employed graduates, age had no significant effect, because for most of the respondents the degree helped them to get a job, regardless of their age.

If Diplom I and Diplom II graduates are compared on the basis of age and employment status at the time of their graduation, then a significant difference (Chi square = 4.58, DF = 1, sig. = .0323) is seen. Graduates with a Diplom II degree reported that they received more benefit from their study on their jobs/careers than did Diplom I graduates. Diplom II graduates who were not employed during their studies and younger than 32 year old when they graduated reported more job/career benefits from studying (69.4 %), while the older employed Diplom I graduates reported the smallest positive effects (25.0 %).

3 Attitude of the social environment to studying at a distance

The attitude of the students' social environment - family, friends, acquaintances, people at work and the employer (s) - should be an important influence on the study success of FeU graduates. Ideally, the support of one's family would make it easier to study than would be the case if the attitude were more negative. In the following section an evaluation of the attitude of the graduates' social environment to the students' distance studies have been presented.

3.1 Social environment

In 54.1 % of the cases, the graduates received absolutely positive general support from their families for their study at a distance. Only 13.9 % of their friends supported the graduates' study. Younger graduates more often received (18.6 %) support than the older graduates (9.9 %). Gender specific differences did not exist, but it is noticeable that the friends of female graduates more often disapproved (16.3 %) their studying than was true for male graduates (10.0 %).

The families of male graduates (50.7 %) were significantly less happy (Chi square = 5.00, DF = 1, sig. = .0254) with their studies than was the case for female graduates (69.8 %). While for women the attitude of the family was relatively independent of age and marital status, differences did indeed exist for the men in relation to their age. Young male graduates in 58.0 % of cases found support within their families for studying at a distance but this was true for only 45.1 % of the older graduates.

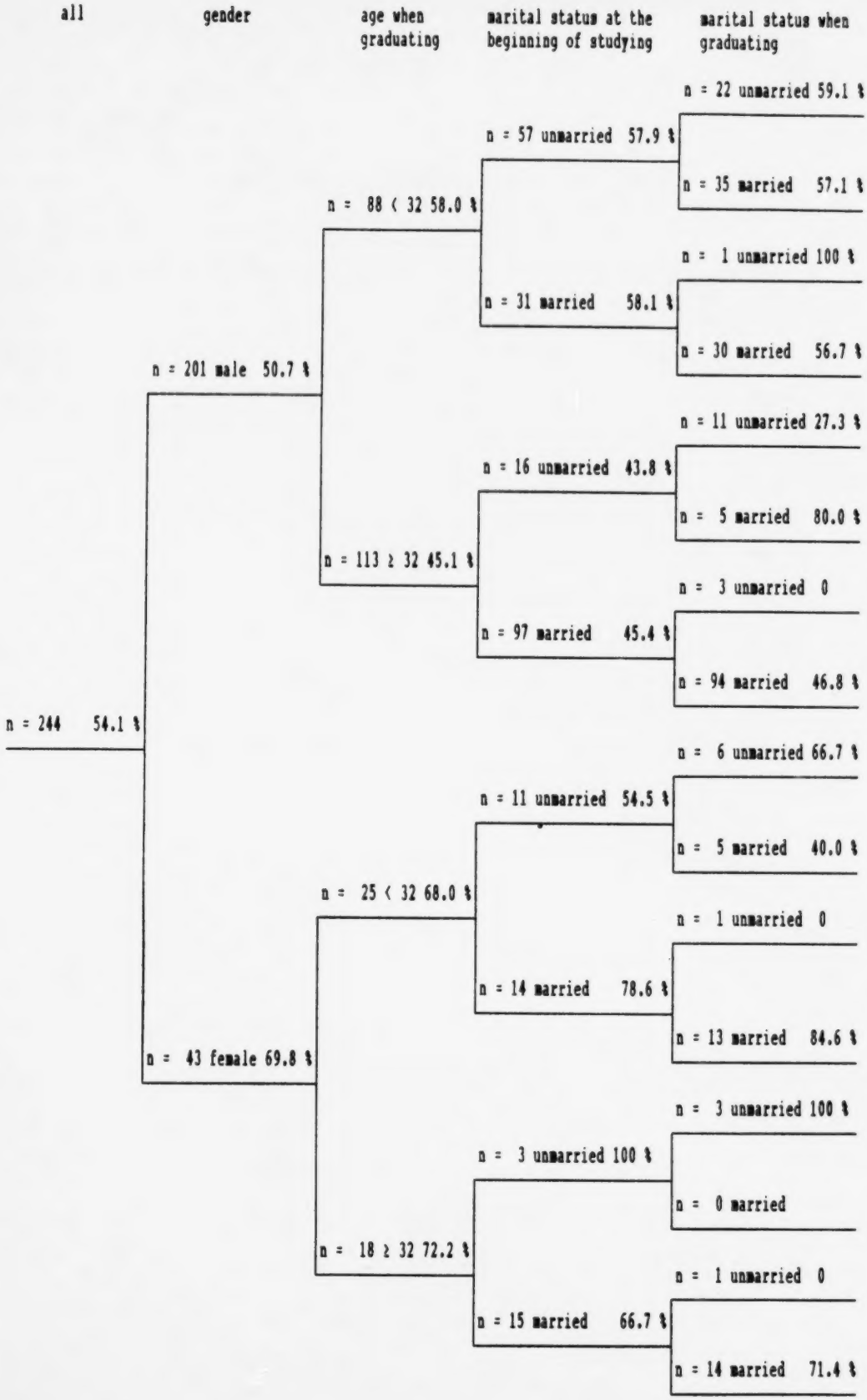
all
gender
age when graduating
marital status at the beginning of studying
marital status when graduating
n = 244 54.1 %
n = 201 male 50.7 %
n = 43 female 69.8 %
n = 88 < 32 58.0 %
n = 113 ≥ 32 45.1 %
n = 25 < 32 68.0 %
n = 18 ≥ 32 72.2 %
n = 57 unmarried 57.9 %
n = 31 married 58.1 %
n = 16 unmarried 43.8 %
n = 97 married 45.4 %
n = 11 unmarried 54.5 %
n = 14 married 78.6 %
n = 3 unmarried 100 %
n = 15 married 66.7 %
n = 22 unmarried 59.1 %
n = 35 married 57.1 %
n = 1 unmarried 100 %
n = 30 married 56.7 %
n = 11 unmarried 27.3 %
n = 5 married 80.0 %
n = 3 unmarried 0
n = 94 married 46.8 %
n = 6 unmarried 66.7 %
n = 5 married 40.0 %
n = 1 unmarried 0
n = 13 married 84.6 %
n = 3 unmarried 100 %
n = 0 married
n = 1 unmarried 0
n = 14 married 71.4 %

Figure 12: Family support of graduates' study

The families of Diplom II graduates were often happier (56.4 %) about their study than those of Diplom I graduates (48.6 %). The support of the family, in general, more strongly affected students without former study experience (61.7 %) than those with prior experience. While this was true for men (for graduates without former study experiences the result was 61.1 %, and for graduates with former study experience 45.0 %), the reverse was true for women (without former study experience 63.6 %, with former study experience 76.2 %). Obviously the female graduates who previously had their studies interrupted received such strong support from their families that they completed their studies successfully.

The families of male graduates (10.0 %) more frequently disapproved or totally opposed the students' studying and especially those of the older graduates (13.3 %), while only 2.3 % of the female graduates reported this.

In their social environment the graduates gained in prestige more often from their circle of acquaintances (53.3 %), than their friends (40.2 %) or their families (39.3 %). In general, there is to see a more pronounced increase in the regard given to female graduates compared to male graduates but the differences are not significant. The same is true for both Diplom II and Diplom I graduates.

The more than 31 year old female graduates gained in prestige within the family after completing their studies (Chi square = 3.92, DF = 1, sig. = .0477), while this proportion is a maximum of

gained in prestige	gender	present marital status								
		unmarried			married			total		
		age when graduating								
		< 32	≥ 32	all	< 32	≥ 32	all	< 32	≥ 32	all
within the family	female	57.1	75.0	63.6	33.3	50.0	40.6	40.0	55.6	46.5
	male	34.8	50.0	40.5	38.5	36.4	37.2	37.5	38.1	37.8
	all	40.0	55.6	45.8	37.3	38.1	37.8	38.1	40.5	39.3
within the circle of friends	female	57.1	50.0	54.5	38.9	42.9	40.6	44.0	44.4	44.2
	male	39.1	42.9	40.5	36.9	40.4	39.0	37.5	40.7	39.3
	all	43.3	44.4	43.8	37.3	40.7	39.3	38.9	41.2	40.2
within the circle of acquaintances	female	85.7	75.0	81.8	38.9	50.0	43.8	52.0	55.6	53.5
	male	65.2	42.9	56.8	47.7	55.6	52.4	52.3	54.0	53.2
	all	70.0	57.1	62.5	45.8	54.9	51.0	52.2	54.2	53.3

Table 34: Gained in Prestige after Completing the Study in the Social Environment *(in percent)*

40 % for the other female and male graduates. From all the groups investigated, the unmarried graduates gained more in prestige than the married graduates (Chi square = 4.36, DF = 1, sig. = .0369).

This effect is very clear seen within the circle of acquaintances of the female graduates. While only 43.8 % of present married female graduates gained in prestige, the same is true for most of the unmarried women (81.8 %). Probably, the circle of acquaintances of married women judged their studies more from the point of view of traditional thought pattern than seems to be the case for unmarried women.

3.2 Occupational environment

Most of the people at the student's workplace and their employers were imformed about the distance studies of the respondents; however, in every fourth case (27.6 %) colleagues were not informed and in 32.2 % of the cases, employers were not informed. From other investigations it is known (Willén 1981, Bartels 1982, Bartels et al 1984), that distance students are on the one hand "afraid that they would be put under more pressure in their jobs because people would assume that someone who takes up a university course does not work hard enough at work. On the other hand, there was always the risk of failure which would mean disgrace if it was generally known that they had been planning to get a degree"

attitude to studying at a distance	people at work			employers		
	gender					
	female	male	all	female	male	all
very happy and generally encouraging	0	2.9	2.6	13.3	16.8	16.5
fairly happy about it but had some reservations	20.0	22.6	22.4	6.7	20.4	19.1
disapproved, could not understand why I bothered	6.7	13.1	12.5	6.7	2.9	3.3
did not know about my studies	33.3	27.0	27.6	40.0	31.4	32.2
others	40.0	34.3	34.9	33.3	28.5	28.9
n	15	137	152	15	137	152

Table 35: Attitude of the People at Work and Employers Towards the Graduates while Studying

(in percent)

(Bartels 1982, p. 11). Of the employed female graduates every third did not inform either their colleagues or their employers about their distance studies. The same was true of the men for only 27.0 % (colleagues) and 31.4 % respectively (employers). The higher degree of secrecy for the female graduates indicates again a clear discrimination of the women. Although the simultaneous undertaking of study while working in a job is negatively regarded for men, than the same is true moreso for the women. Fear of losing the job was very characteristic for the women.

In only 2.6 % of the cases the colleagues (exclusively those of male graduates) were very happy about their study, but this was the case for 16.5 % of the employers. Every eighth colleague (12.5 %) and only 3.3 % of the employers disapproved of study while working. In a highly competitive work situation, rivalry between colleagues leads to a fear of distance students gaining formal qualifications which might cause their co-workers to lose out in future promotions. Thus people at work often feel threatened when a colleague decides to study at a distance rather than viewing it as an endeavor which they should support emotionally or even materially.

The following graduate describes very clearly his difficulties in his job:

- *The shortage of time, the detailed planning of all activities (job, study, private life as far as this was already existing) made me overly nervous and I have not recovered from that at present. There is also the fact of secrecy to avoid spitefulness = on the part of the colleagues who eventually*

envy my promotion prospects, on the part of the bosses who fear future rivalry. In my case they would have forbidden my studying while I am working with the explanation that I would neglect my compulsory services.

Graduates who were working during their studies as well as at present gained in prestige from their employers (57.6 %) as well as from their colleagues (56.3 %). Graduates who were not employed during their studies but who have a job at present generally gained less in prestige (employer 54.9 %; colleagues 46.5 %), but the differences are not significant.

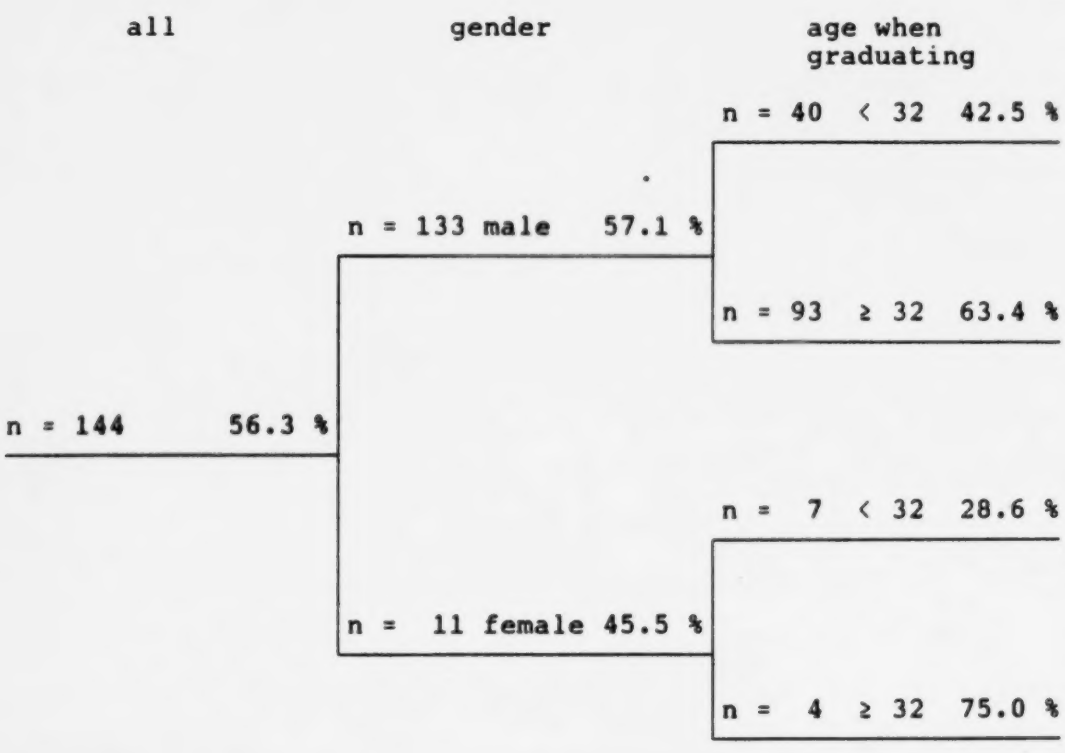

Figure 13: Prestige Gained in by the Graduates During as well as at Present Employment from Colleagues

4 Employment

In this section, the results of the questions that the graduates were asked about how they have progressed in their employment after getting the FeU degree are presented. The intention from these questions was to examine, whether the efforts of studying at a distance have brought increased job benefits for the graduates or not? However, it should be noted that for many of the graduates the lapse of time between graduation and the study (beginning of 1985) was not sufficient enough to have experienced significant benefits in their jobs.

4.1 Original employment

4.1.1 Field of activity

Before the graduates started their studies, 87.6 % of the men and 69.8 % of the women were employed. Every eighth man (12.4 %) continued his education at the FeU directly after school. On the other hand 25.6 % of the female graduates did not have vocational training and a further 4.7 % said they were exclusively housewives.

In 60.0 % of the cases, those female graduates who had a job were employed in business (50.0 % as clerk and 10.0 % as bank or insurance clerk). There were only a small number of women working in other fields of activities.

Of those who were employed during their studies as well as at present, male graduates gained in prestige (57.1 %) from their colleagues to a greater extent than the female graduates (45.5 %). The age of the graduates in this regard is significant (Chi square = 6.92, DF = 1, sig. = .0085). Older male (63.4 %) as well as female graduates (75.0 %) more often gained in prestige from their colleagues than the younger than 32 year old graduates (men 42.5 %; women 28.6 %) because the colleagues respected and recognized their achievement because of their age.

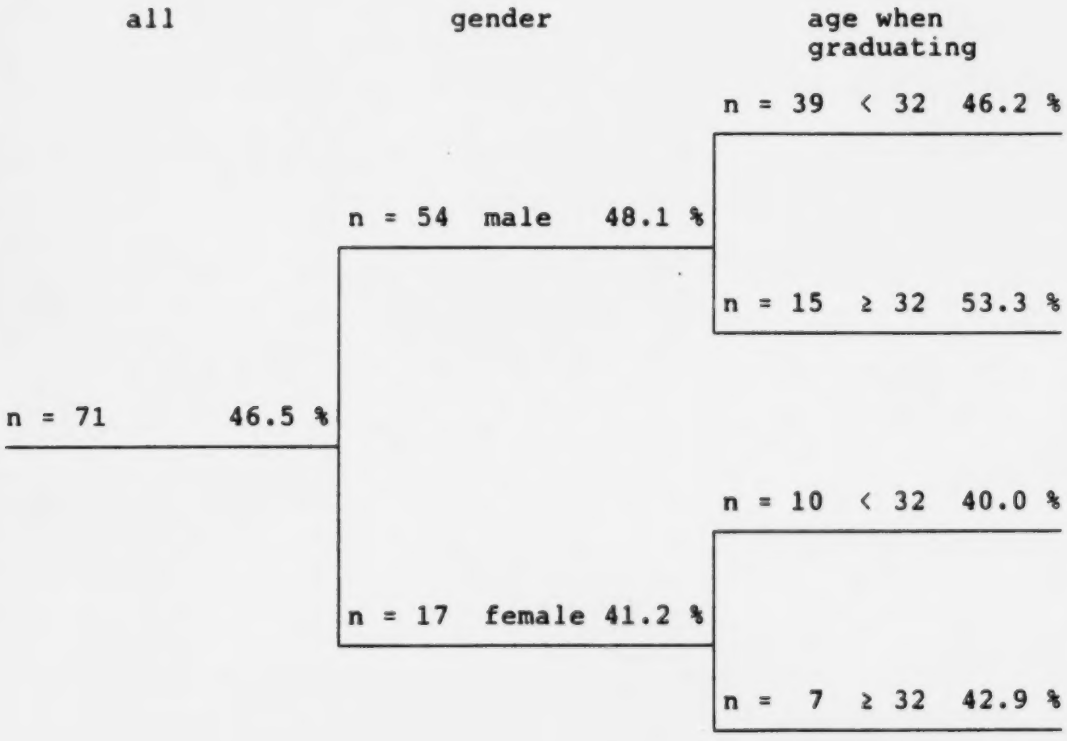

Figure 14: Prestige Gained in by the not Employed Graduates During the Study from Colleagues in the Employment which they got after Graduation

As mentioned, the amount of prestige gained was lower for graduates who did not work while studying but who are at present employed (46.5 %) compared to those graduates who have been employed

all the time (56.3 %). Of these graduates the younger students also gained in prestige to a lesser extent (men 46.2 %; women 40.0 %) than the older graduates (men 53.3 %; women 42.9 %). The colleagues of the younger graduates are probably more sceptical with respect to the study results of these graduates and for this reason they did not offer the respect due to them. Graduates with a Diplom II degree gained in prestige to a greater extent (58.2 %) than those with a Diplom I degree (52.8 %).

Female (63.6 %) and male graduates (57.1 %) who were employed during their studies, as well as at present, gained in prestige from their bosses to approximately the same extent. While the differences among the women were independent of age, differences existed between younger (45.0 %) and older male graduates (62.4 %).

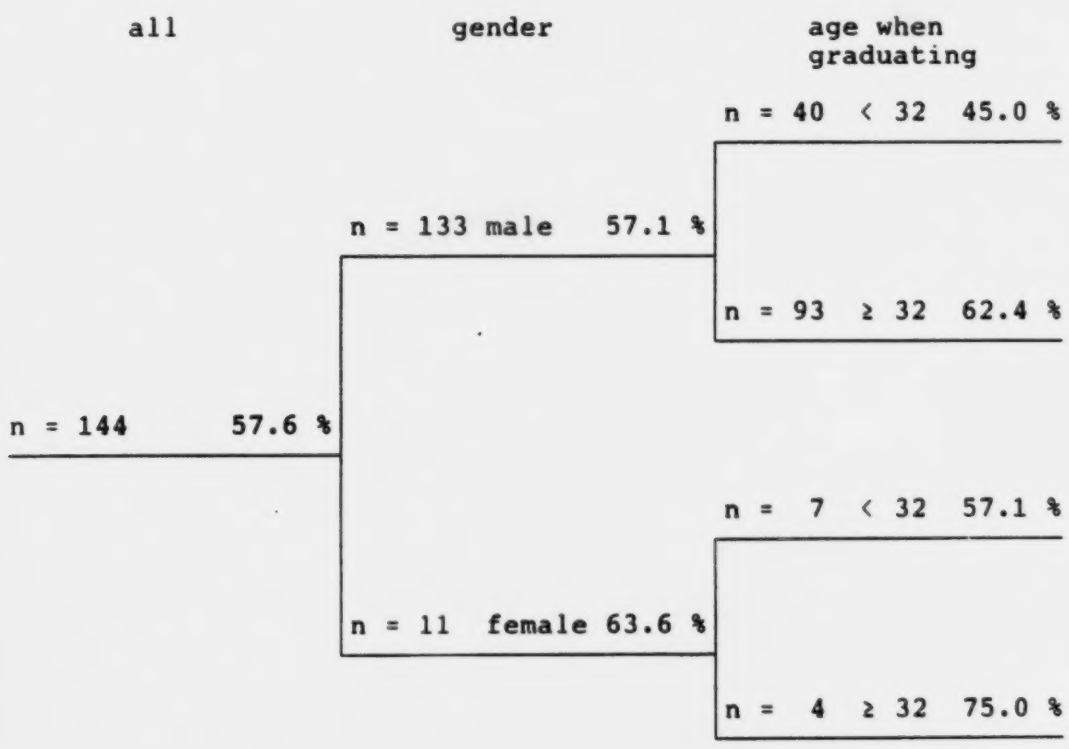

Figure 15: Prestige Gained in by the Graduates from Employers During as well as at Present Employment

tor. Every tenth male graduate (10.2 %) was still in training because he was in apprenticeship, and 10.8 % were in military services as regular soldiers as soldiers serving for a set time or in compulsory service. In most cases (seventeen out of nineteen) the men who worked for military services were regular soldiers or soldiers who were serving for a set time. The goal of these graduates was to earn additional qualifications in a civil field which they can use when their time in the army is over. Only some of the male graduates (3.4 %) had a job as a consultant before beginning their studies.

If all those graduates are put together who were working for public institutions, then every third male (35.8 %) and every fourth female graduate (26.7 %) worked in this field. Accordingly, every third graduate (34.5 %) was working for the government at the beginning of their distance study.

4.1.2 Job position

56.7 % female graduates, who were originally employed before they began to study at a distance, were in the position of a specialist. The same was true only for 34.1 % male graduates, but on the other hand 18.2 % were in professional and executive and 4.0 % were in senior levels of civil service. Of the male graduates, 4.5 % were in the position of head of department or group leader and a further 1.7 % had positions as factory or business managers. There were no significant differences with respect to the original job positions of the graduates irrespective of the kind of Diplom

Within the group of graduates who first worked after completing their studies, the more than 31 year old women are remarkable because 71.4 % said they gained in prestige from their bosses. However, the same was true for only 30.0 % of the younger than 32 year old women.

For the employers obviously no effect existed with respect to the prestige of their staff if the staff completed their studies with a Diplom I (60.4 %) or a Diplom II degree (56.0 %). The grade of recognition which they give to their staff is more dependent on the worth of performance than on the more formal criterion of the kind of Diplom.

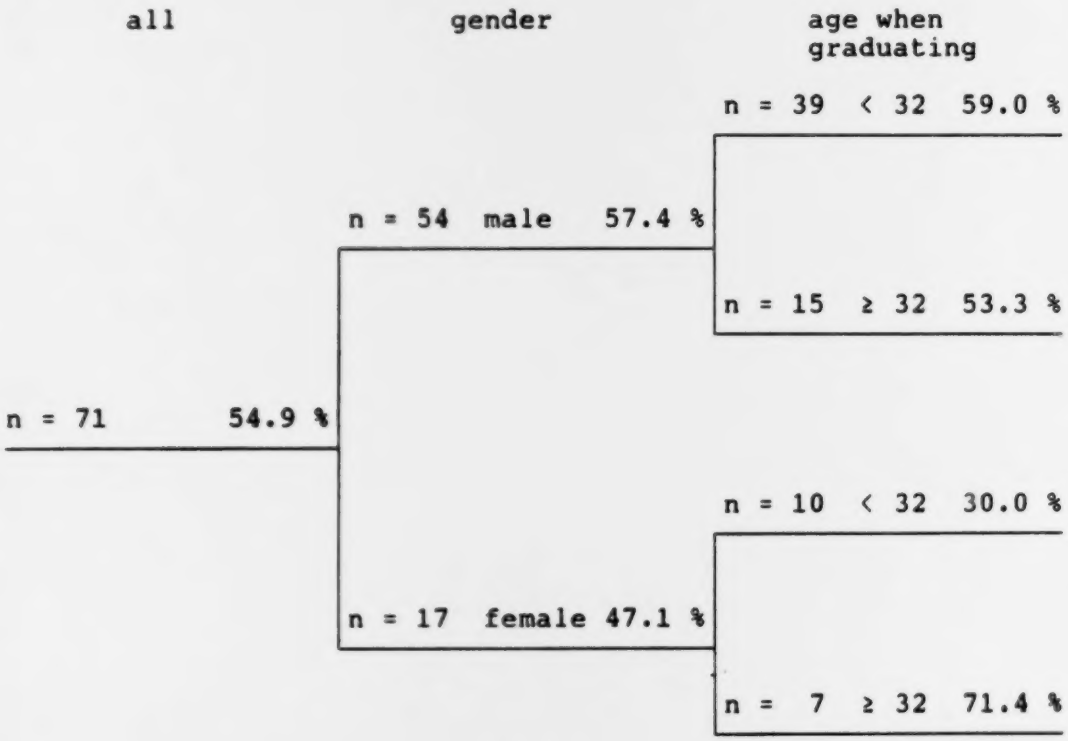

Figure 16: Prestige Gained in by the not Employed Graduates During the Study from Employers in the Employment which they got after Graduation

Graduates with a Diplom I degree (49.2 %) gained in prestige to a surprisingly higher extent from their professional counterparts than graduates with a Diplom II degree (44.0 %) but the differences are not significant.

The recognition of the graduates by their professional counterparts is independent of whether the graduates worked while studying at a distance (45.4 %) or not (45.8 %). Also the gender and age did not influence the amount respect received from their professional counterparts. The prestige of the older graduates who were employed the whole time is, at 47.1 %, relatively high but the difference among the younger graduates differs only negligibly at 42.0 %.

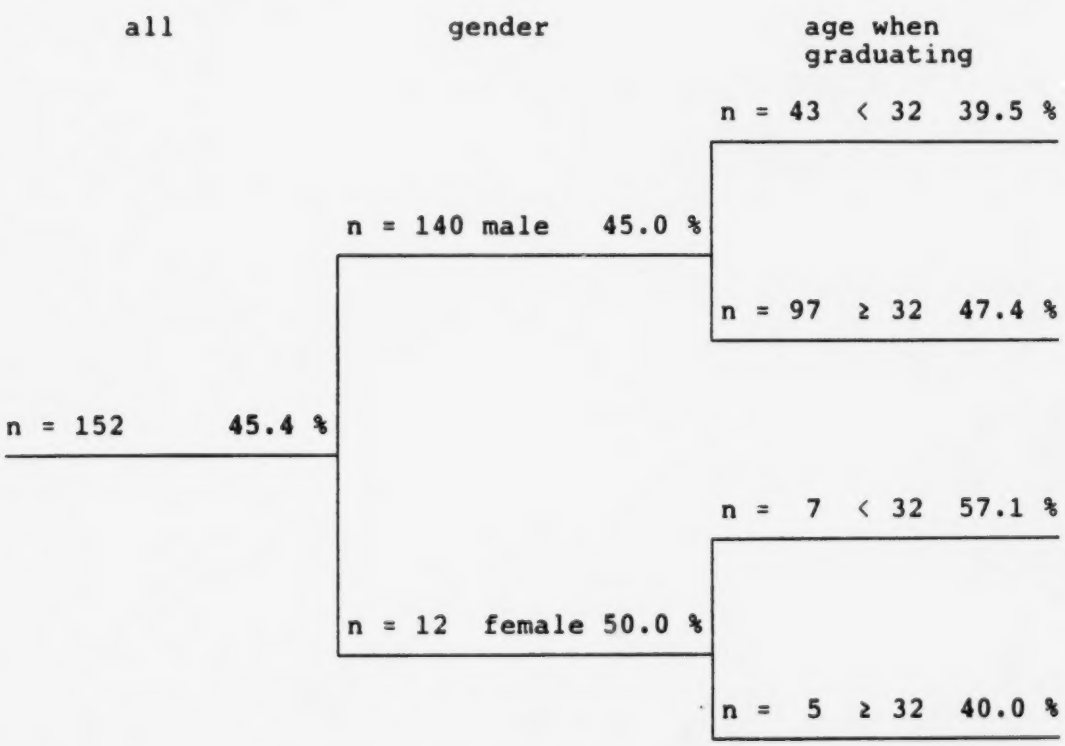

Figure 17: Prestige Gained in by the Graduates from Professional Counterparts During as well as at Present Employment

To the same extent than from colleagues and employers gave also the professional counterparts of the graduates who started work after completing their studies and who were older than 31 year by graduation the lowest prestige proportion (36.4 %) than it was the case for the younger graduates (50.0 %). The younger graduates gained in prestige from their colleagues, employers and professional counterparts relatively quickly. This result is a positive sign also for the FeU because it can be considered as the recognition of its teaching work.

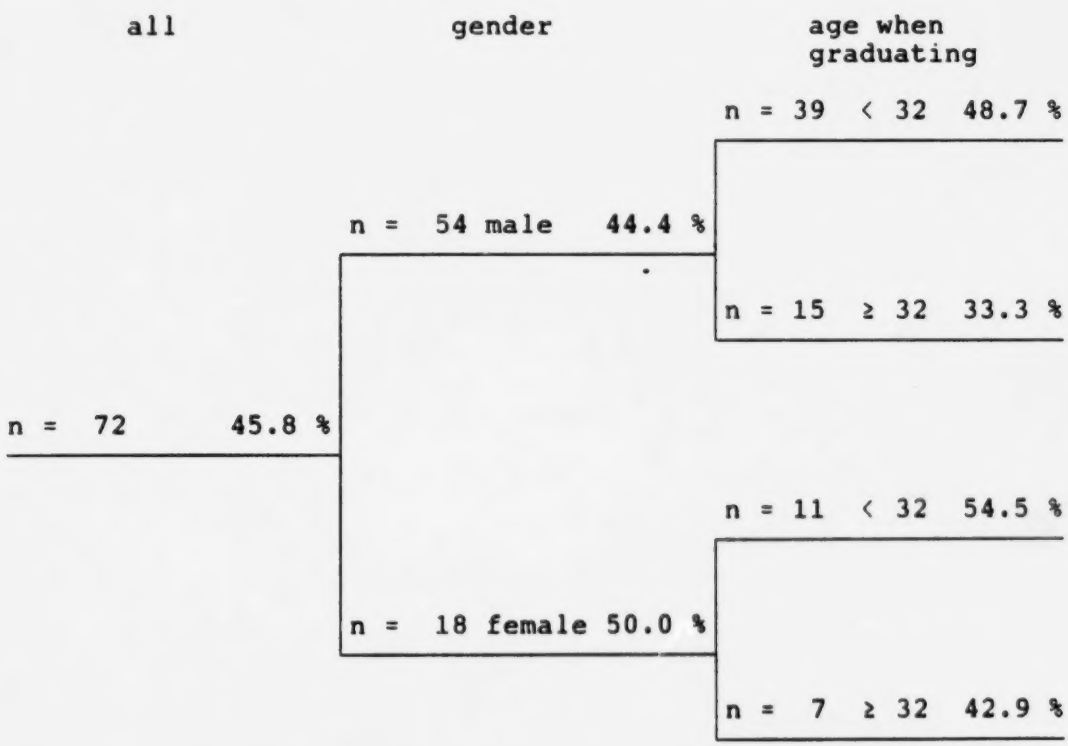

Figure 18: Prestige Gained in by not Employed Graduates from the Professional Counterparts in the Employment which they got after Graduation

3.3 Considering of the worth of the FernUniversität Diplom

It is very important for the FeU that their degrees are considered by the public as equivalent to the degrees of conventional universities. In one question, the graduates were asked about their own opinion as well as those of employers, people at work and academics of other universities with respect to the worth of the FeU Diplom.

The Diplom of a conventinal university can be exclusively compared with a degree of the long-cycle study program (Diplom II) at the FeU. Nevertheless, the responses of the Diplom I graduates are also presented because these will show us how these graduates regard their own degree.

Diplom I (54.2 %) as well as Diplom II graduates (52.9 %) think that there are no differences at all between the Diplom which they earned at the FeU, compared to degrees of conventional universities although, as mentioned, just the Diplom II degree is comparable in this respect. Obviously Diplom I graduates consider their degree in another light. The proportion of the subject matter required for study for a Diplom I in the core subjects is less than that for a Diplom II. In addition, they do not have to study a supplementary subject. Every third graduate (33.4 %) of the short-cycle study program agreed with the statement given that the Diplom I has a lower standard compared to the degrees earned at a conventional university but the same was true for every fourth Diplom II graduate (24.4 %). In the opinion of every seventh graduate of the long-cycle course of studies (13.9 %) the FeU degree has a higher standard than those degrees from other universities.

Of the Diplom I graduates 5.6 % share this opinion. This more elitist opinion is held especially by male graduates who were employed during their studies and at present as well (21.5 %).

The following are some comments of graduates who prefer that the FeU should be an elitist institution:

- *There is a benefit for the graduates if the FeU appears in the public not too much as an 'Open University' but rather emphasizes the high requirements which the students have to fulfill. If you are a graduate of an elitist university then it is easier for you to find employment than would be the case if the degree of the FeU has a very low reputation. The reputation of a university has nothing to do with the real existing requirements but they have to do more with the self-portrayal of the institution.*

- *I would like to emphasize a warning specifically against reducing the present level of the courses even if my opinion is directly contrary to that of my fellow students. The endeavor should be to take the direction of raising the level because through this the market value of the FeU and their graduates is determined.*

- *If the FeU is to be recognized as an established institution within the FRG than the FeU has to take care in their own interest as well as in the interests of their students to hold the level stable (no lowering of Diplom degree!).*

- *For me it is very important to look at the FeU like every other conventional university (the only difference is that they have no lecture rooms) with respect to their scientific qualifications and the possibilities to strive for these qualifications. Under no circumstances should the FeU be viewed as an institution that mostly attracts employed people who will qualify at the same time. Of course they can do this - in fact very well. But in public relations work, the FeU should stress more the characteristics of a genuine 'University' with the very high quality of their studies, to save 'serious students' like me, the disadvantage of reputation.*

The employers of Diplom II graduates in 47.4 % of cases have the opinion that no difference exists between the Diplom of the FeU and the conventional universities. The "acceptance of distance education" (Battis 1984, p. 31) by the people who are responsible for hiring personnel in their companies is also reflected in their opinion that only 17.3 % think the Diplom of the FeU has less merit than those of conventional universities. Diplom I graduates report about the same consideration of the Diplom as Diplom II graduates. As the question of prestige showed, it seems that the employers do not distinguish if a graduate obtained a Diplom I or a Diplom II degree. The effective output of the graduates seems to be more a relevant criterion than the kind of Diplom which the graduates received.

In most cases the opinion of others at work of Diplom I graduates was unknown (58.0 %), moreover every third Diplom II graduate (37.1 %) did not know how their colleagues regarded their Diplom

considering the FernUniversität Diplom	self		employer		others at work		academics of other universities	
	Diplom I	Diplom II	Diplom I	Diplom II	Diplom I	Diplom II	Diplom I	Diplom II
FeU Diplom equivalent to others	54.2	52.9	40.3	47.4	16.1	36.5	20.8	36.6
FeU Diplom of lower standard than others	33.4	24.4	19.4	17.3	19.4	19.9	38.9	31.4
FeU Diplom of higher standard than others	5.6	13.9	1.6	8.3	6.5	6.4	2.8	5.2
do not know	6.9	8.7	38.7	24.9	58.0	37.1	37.5	26.8
n	72	172	62	156	62	156	72	172

Table 36: To Consider that the FeU Diplom is Equivalent to the Diplom Given by other German Universities
(in percent)

to those of the conventional universities. The colleagues of the graduates with a long-cycle degree have, in general, a more negative opinion than is the case for the employers.

Academics of other universities, more than the others, state that the Diplom II of the FeU compared to conventional universities has a lower standard (31.4 %). Just 36.6 % of the academics of other universities consider the FeU Diplom equivalent to others. It is to assume that the academics of other universities are prejudiced against distance education because they think university study is only possible at a conventional university. Only here can the students gain the experience and practice in such important factors as that of university socialization like learning and discussing in a group. Most of the graduates have already had this experience

and with their age and their integration into occupations and family life they do not attach importance to these factors (Bartels 1982 b). Many critics do not like to believe this and therefore they cannot imagine that distance study is as good as study at conventional universities.

Also, in another sense, it is very clear that the FeU Diplom is equivalent to the degrees given by other universities. Two out of three graduates (63.9 %) had the experience that there were neither pros nor cons with respect to their degrees. Nearly every fifth graduate (18.5 %) believed there were advantages and every eighth graduate (12.7 %) thought there would be more disadvantages with the FeU Diplom compared to a Diplom of a conventional university. The female graduates less often expressed the opinion that there would be advantages (9.3 %) than was true for their male fellow students (20.4 %), and on the other hand more women (16.3 %) than men (12.0 %) reported disadvantages which they had to accept.

Reasons for the advantage of the FeU degree as indicated by the graduates are that the employers assume that through their experience with studying while they were working, graduates of the FeU will have the ability to take more stress in their job than it is the case for graduates of conventional universities. Respondents who suffered disadvantages explained that this was due to low prestige of the FeU degree and especially pointed out that the title of the 'Diplom-Ökonom' is unknown outside of North Rhine-Westphalia. Some other universities of North Rhine-Westphalia also confer this title. For some graduates, a disadvantage was that the FeU was not well-known. Graduates often had the negative experience

that many people compared the FeU with private correspondence institutions which in the past in the FRG have not had a very good reputation because of their more commercial interests.

Some comments of graduates about pros and cons of the FeU Diplom are presented below:

Pros:

- *The employers indicated a higher engagement, endurance, purposefulness. Whoever gets through this has shown that he will and can have a top position.*

- *Employers found that studying at a distance at the same time as baring full-time employment is a sign of being able to take stress.*

- *Advantage in personality such as: resolution, ambition, and capability of logical thinking were highly regarded.*

- *Because I have completed my study while I was working the personnel manager considered that I am capable, able to take more stress, endurance, etc.*

- *To study at a distance is a sign that you have a strong intrinsic motivation for learning.*

Cons:

- *For the graduates it would be more helpful if the FeU would be more in the lime-light allover in Germany! It is possible to intensify the public relations work even with restricted*

resources. For many personnel managers and employers of 'middle and small size companies' the FeU is still unknown. We, the graduates very often have to do advertisement work. Hagen forgets that most of the students live outside North Rhine-Westphalia.

- *The FeU confers as an academic degree the title of a 'Diplom-Ökonom'. I think, it would be much easier for the graduates of the FeU, if they could leave the university as 'Diplom-Kaufleute' or 'Diplom-Volkswirte'. I had the experience that the academic degree 'Diplom-Ökonom' triggered off some displeasure and needs a lot of explanation.*

- *Very often employers are sceptical of persons who earned their Diplom at home without any social contacts. Employers do not believe that it is possible to integrate these persons within the existing personnel structure.*

- *Partly it was questioned whether I had studied quickly and determinedly! I always had to explain and to justify why I studied with the FeU and not at a conventional university.*

- *Students of a different type of education (independent of the FeU or a conventional university) are respected as small-time students.*

- *Very often people believe that the exams were not conducted in the same way as in the conventional system.*

- *Prejudice with respect to the level of training. More achievement necessary.*

- *People compare the FeU with untrustworthy private correspondence institutions because in Bavaria the FeU has probably not got the need publicity.*

- *Study at a distance and the Diplom are not viewed as a degree of a scientific university, rather more as a correspondence course.*

original employment	female	male	Diplom I	Diplom II	all
without	30.2	12.4	11.1	17.4	15.6
with	69.8	87.6	88.9	82.6	84.4
n	43	201	72	172	244
those who were in employment are ...					
apprenticeship	10.0	10.2	7.8	11.3	10.2
business, trade	50.0	18.2	20.3	23.9	22.8
bank/insurance clerk	10.0	5.1	6.3	5.6	5.8
technical clerk		4.0	3.1	3.5	3.4
consultancy		3.4	3.1	2.8	2.9
government non-administ.	3.3	6.3	3.1	7.0	5.8
government administrat.	10.0	13.6	12.5	13.4	13.1
teacher (public, priv.)	6.7	2.8	4.7	2.8	3.4
university		2.3	3.1	1.4	1.9
military service		10.8	9.4	9.2	9.2
engineer, natural scien.	3.3	13.6	15.6	10.6	12.1
others	3.3	9.7	10.9	8.5	9.2
n	30	176	64	142	206

Table 37: Original Employment

(in percent)

The original jobs of the male graduates were more diversified than was the case for the female graduates. Although jobs in business was the single highest numbers for the men, every fourth male graduate (27.3 %) worked in this field (18.2 % clerk; 5.1 % bank/ insurance clerk; 4.0 % technical clerk). 13.6 % men were employed as engineers/natural scientists or for the government. A further 6.3 % worked for the government but in the non-administrative sec-

original job position	female	male	Diplom I	Diplom II	all
specialist, expert	56.7	34.1	39.1	36.6	37.4
head of department, group leader	3.3	4.5	6.3	3.5	4.4
factory manager, business manager		1.7	1.6	1.4	1.5
assistant	3.3	2.8	3.1	2.8	2.9
professional, executive levels of civil service	3.3	18.2	14.1	16.9	16.0
senior levels of civil service		4.0	7.8	1.4	3.4
without statement to the level of career as a civil servant	3.3	6.3	4.7	6.3	5.8
self-employed		2.3	3.1	1.4	1.9
still in training	13.3	11.4	9.4	12.7	11.7
without statement	16.7	14.8	11.0	16.9	15.1
n	30	176	64	142	206

Table 38: Original Job Position

(in percent)

they earned. Already at the beginning of their studies 7.8 % Diplom I and 1.4 % Diplom II graduates were in senior level civil services.

In 20.0 % of the cases, engineers/natural scientists were already in the position of head of department or factory or business manager.

4.1.3 Branch of industry, business

Female graduates were mainly employed as clerks in: banks/insurance companies (20.0 %); industry (16.7 %); building and construction industry or aviation (each 6.7 %). All other branches had only small numbers.

Of the male graduates the largest group was employed within industrial development (17.6 %). A further 13.1 % worked for the government and 11.4 % for the army/police. Of the male graduates, 11.9 % were employed as clerks in industry and 10.2 % in banks/insurance companies.

In 21.9 % of cases, graduates with a Diplom I degree worked in industrial development. These were either engineers or those who completed vocational training. Graduates with a Diplom II more often than Diplom I graduates were in occupations that had a strong relationship to the course of studies, economics.

4.1.4 Occupational training

At the time of beginning a distance study, 11.6 % female graduates but only 4.5 % male graduates had not yet begun or had not completed occupational training. Of the women (30.2 %) as well as of the men (21.9 %), the greatest proportion were still in occupational training. An apprenticeship training 27.9 % of the female and 21.4 % of the male graduates had completed their training.

original branch of industry, business	female	male	Diplom I	Diplom II	all
industry, research	3.3	2.3	3.1	2.1	2.4
industry, development	3.3	17.6	21.9	12.7	15.5
industry, business	16.7	11.9	9.4	14.1	12.6
building and construction industry	6.7	1.7	3.1	2.1	2.4
trade	10.0	6.8	6.3	7.7	7.3
federal railway, federal mail	3.3	6.3	1.6	7.7	5.8
aviation	6.7	4.0	3.1	4.9	4.4
banks, insurances	20.0	10.2	10.9	12.0	11.7
schools	3.3	1.7	4.7	.7	1.9
publishing		.6		.7	.5
health service	3.3	1.7	1.6	2.1	1.9
legal advising, business consultance	3.3	3.4	3.1	3.5	3.4
laboratory		1.1	1.6	.7	1.0
associations	3.3	.6		1.4	1.0
military service, police		11.4	9.4	9.9	9.7
government	10.0	13.1	14.1	12.0	12.6
universities		1.7	1.6	1.4	1.5
without statement	6.7	4.0	4.7	4.2	4.4
n	30	176	64	142	206

Table 39: Branch of Industry/Business the Employed Graduates Originally Worked

(in percent)

original occupational training	female	male	Diplom I	Diplom II	all
without	11.6	4.5	5.6	5.8	5.7
apprenticeship, business school	27.9	21.4	19.4	23.8	22.5
Dipl. Betriebswirt (FHS)	2.3	6.0	2.8	6.4	5.3
Diplom Kaufleute, Diplom ökonom		.5	1.4		.4
Diplom Ing. (FHS)	2.3	11.9	8.3	11.1	10.2
Diplom Ing. (university)		2.5	4.2	1.2	2.0
other FHS degree		.5		.6	.4
other university degree		3.5	5.6	1.7	2.9
study without degree	4.7	2.0	2.8	2.3	2.5
exam for the career as civil servant		7.5	6.9	5.8	6.1
bank academy, administration academy	2.3	1.0		1.7	1.2
state examination	2.3	2.0	5.6	.6	2.0
training as army officer		9.5	8.3	7.6	7.8
exam as tax consultant		.5	1.4		.4
exam for master craftsman's or technician certificate	4.7	1.0	2.8	1.2	1.6
practical training	2.3	3.0	5.6	1.7	2.9
abitur	2.3	.5		1.2	.8
still in training	30.2	21.9	18.1	25.6	23.4
without statement	7.0	.5	1.4	1.7	1.6
n	43	201	72	172	244

Table 40: Original Occupational Training

(in percent)

4.2 Employment at the beginning of study

4.2.1 Scope of employment

At the beginning of their study, 37.2 % female and 78.1 % male graduates had a full-time job. Only 3.3 % worked part-time. Two out of five graduates (37.2 %) were housewives.

student category	gender	scope of employment at the beginning of study							
		full-time	part-time	student	home-maker	unemployed	partly employed	self employed	n
full-time	female	41.4	13.8	6.9	31.0	3.5	3.5		29
	male	58.1	2.1	30.1	2.2	2.2	1.1	4.3	93
	all	54.1	4.9	24.6	9.0	2.5	1.6	3.3	122
part-time	female	28.6	7.1	14.3	50.0				14
	male	97.2	.9	.9				.9	106
	all	89.2	1.7	2.5	5.8			.8	120
visiting	female								
	male			100					2
	all			100					2
total	female	37.2	11.6	9.3	37.2	2.3	2.3		43
	male	78.1	1.5	15.4	1.0	1.0	.5	2.5	201
	all	70.9	3.3	14.3	7.4	1.2	.8	2.1	244

Table 41: Scope of Employment at the Beginning of Study
(in percent)

Male Diplom I graduates were more often (85.9 %) in a full-time position at the beginning of study than were Diplom II graduates (74.5 %). Nearly every male (97.2 %) but only every fourth female

part-time student (28.6 %) had a full-time job at the time of matriculation. The same was true also for 58.1 % male and 41.4 % female full-time students. Only 30.1 % male and 6.9 % female full-time students had the opportunity to concentrate fully on their study, while 2.2 % were unemployed at the beginning of their studies.

Age had a significant relationship to the employment status of the graduates. Of the male graduates who were older than 31 year, 92.0 % were working full-time at the time they matriculated but the same was true only for 60.2 % of the younger graduates. A very similar situation existed for the female graduates - but to a lower extent. Of the younger female graduates 32.0 % were employed full-time compared to 44.4 % of the older female graduates.

4.2.2 Scope of employment while studying

During the study there was a siginificant drop in the amount of full-time employment of the graduates. Only 14.0 % female and 59.7 % male graduates worked full-time while studying at a distance. In general, amongst the part-time students there were relatively few changes with respect to employment status. For this reason it can be said that male part-time students really studied while working for a living. With this information one has to consider length of study in another light. As it is seen in section 2.5 the total number of semesters was not double that of full-time students, although this latter group of students were employed full-time.

The situation is very different for students who were studying full-time. Only 10.3 % female and 22.6 % male graduates (Diplom I 36.4 %; Diplom II 18.3 %) had a full time job while they studied at a distance. Nearly every third full-time student (29.5 %) had the opportunity to concentrate fully on studies as a distance education student, and this was true more often for men (33.3 %) than for women (17.2 %). Twenty-nine of the thirty-three male graduates were exclusively students while they studied and they were younger than 32 years in age.

student category	gender	scope of employment while studying								
		full-time	part-time	student	home-maker	unemployed	retired	partly employed	self employed	n
full-time	female	10.3	27.6	17.2	31.0			13.8		29
	male	22.6	17,2	33.3	5.4	4.3	1.1	11.8	4.3	93
	all	19.7	19.7	29.5	11.5	3.3	.8	12.3	3.3	122
part-time	female	21.4	7.1	14.3	50.0			7.1		14
	male	93.4	.9		.9	.9		2.8	.9	106
	all	85.8	1.7	1.7	6.7	.8		3.3	.8	120
visiting	female									
	male			100						2
	all			100						2
total	female	14.0	20.9	16.3	37.2			11.6		43
	male	59.7	8.5	16.4	3.0	2.5	.5	7.0	2.5	201
	all	51.6	10.7	16.4	9.0	2.0	.4	7.8	2.0	244

Table 42: Scope of Employment while Studying

(in percent)

The data on the graduates shows that, in general, only some of the full-time students had full-time employment during the time they studied at a distance. While studying full-time, the students obviously have to set different priorities in order to complete their study in a relatively short time. As it is seen, there were no significant differences in the length of study for full-time students with a full-time employment while studying as compared to the part-time or not employed students. The graduates working for a living must be very goal orientated students in order to have completed their studies in a relatively shorter time than specified.

4.2.3 Field of activity

Female graduates who were employed at the beginning of their study for the most part worked as clerks. Every second female graduate (54.5 %) worked in the industrial manager/trader fields and a further 4.5 % were employed as bank or insurance clerks. Nearly every fourth employed female graduate (22.7 %) worked for the government, either in adminstration or non-administration (each 9.1 %) or worked in the schools (4.5 %).

The largest proportion of employed male graduates worked as industrial manager/trader (19.9 %) or as engineer/natural scientist (15.7 %). Every eigth graduate (12.0 %) worked for the military services as a regular soldier/soldier serving for a set time (9.0 %) or in compulsory service (3.0 %). In total every sixteenth

field of activity at the beginning of study	female	male	Diplom I	Diplom II	all
apprenticeship	9.1	3.0	1.6	4.8	3.7
business, trade	54.5	19.9	24.2	23.8	23.9
bank/insurance clerk	4.5	6.0	9.7	4.0	5.9
technical/computer clerk		5.4	6.5	4.0	4.8
consultancy	4.5	5.4	4.8	5.6	5.3
government non-administ.	9.1	6.6	3.2	8.7	6.9
government administrat.	9.1	15.7	12.9	15.9	14.9
teacher (public, priv.)	9.1	3.6	4.8	4.0	4.3
university		2.4	3.2	1.6	2.1
military service		12.0	8.1	.9	10.6
engineer, natural scien.		15.7	17.7	11.9	13.8
others		4.2	3.2	4.0	3.7
n	22	166	62	126	188

Table 43: Field of Activity at the Beginning of Study of Employed Graduates

(in percent)

male graduate, at the beginning of study, was employed as bank clerk/insurance clerk (6.0 %), technical clerk (5.4 %) or in a consultative job (5.4 %).

4.2.4 Job position

Nearly two out of every three female graduates (63.6 %) who were employed at the start of their study had a job position at the level of a specialist/expert. At that time only one female graduate (4.5 %) held the position of head of department.

job position at the beginning of study	female	male	Diplom I	Diplom II	all
specialist, expert	63.6	30.7	38.7	32.5	34.6
head of department, group leader	4.5	8.4	11.3	6.3	8.0
factory manager, business manager		3.6	4.8	2.4	3.2
assistant	4.5	3.0	3.2	3.2	3.2
professional, executive levels of civil service	4.5	18.7	9.7	20.6	17.0
senior levels of civil service		4.8	9.7	1.6	4.3
without statement to the level of career as a civil servant	4.5	6.6	3.2	7.9	6.4
self-employed		3.0	4.8	1.6	2.7
still in training	9.1	4.2	3.2	5.6	4.8
others		1.2		1.6	1.1
without statement	9.1	15.7	12.3	16.7	14.9
n	22	166	62	126	188

Table 44: Job Position at the Beginning of Study of Employed Graduates

(in percent)

Of the men 30.7 % were in the position of a specialist/expert and every eigth held a leading position either as head of department (8.4 %) or as factory/business manager (3.6 %). Of the male graduates, 18.7 % (22.5 % Diplom II graduates) were employed in professional/executive levels of civil service. These graduates started

their studies with the expectation of getting a job in the senior levels of civil service after completing the degree at the FeU. In 9.5 % of the cases male graduates already held such a position at the beginning of study.

At the time of enrolment, 38.5 % of the engineers/natural scientists were already in the positions of head of department or factory/business manager, although most of these graduates had just been in their jobs since 1975. This obviously reflected the very good job prospects of engineers/natural scientists.

4.2.5 Branch of industry, business

The proportion of graduates who already worked for the government before studying at the FeU was relatively high (34.5 %), and it is interesting to note that this part increased to 39.9 % after matriculation. Male Diplom II graduates had the highest percentage (45.0 %) of governmental employees. But also every third male Diplom I graduate (31.3 %) worked for the government.

Female graduates were less often employed (22.7 %) with the government than were the male graduates. Therefore did the male graduates who worked for the government have especially good conditions for studying which then made it possible to study successfully while working for a living? It seems reasonable to suppose that within the government even more than in the private sector former qualifications matter more than actual job performance. Most of the graduates who were employed by the government certain-

branch of industry, business at the beginning of study	female	male	Diplom I	Diplom II	all
agricultural, forestry		.6		.8	.5
industry, research	4.5	2.4	4.8	1.6	2.7
industry, development		13.9	19.4	8.7	12.2
industry, business	13.6	12.7	9.7	14.3	12.8
building and construction industry	9.1	1.2	3.2	1.6	2.1
trade	9.1	7.2	9.7	6.3	7.4
federal railway, federal mail		6.0		7.9	5.3
aviation	9.1	4.2	3.2	5.6	4.8
banks, insurances	18.2	8.4	11.3	8.7	9.6
schools	4.5	3.0	4.8	2.4	3.2
publishing	4.5	.6	1.6	.8	1.1
health service	4.5	1.2	1.6	1.6	1.6
legal advising, business consultance	4.5	4.8	3.2	5.6	4.8
laboratory		1.2	1.6	.8	1.1
associations	4.5	.6		1.6	1.1
military service, police		14.5	8.1	15.1	12.8
government	13.6	15.7	16.1	15.1	15.4
universities		1.8	1.6	1.6	1.6
n	22	166	62	126	188

Table 45: Branch of Industry/Business the Employed Graduates Worked at the Beginning of Study

(in percent)

ly started their study at the FeU hoping for promotion into a career in the senior levels of civil service. To what extent this goal was realized will be evaluated later.

4.2.6 Occupational training

At the time of matriculation every fifth employed female graduate (22.7 %) had no training for their job. All these women were employed in business. One out of four female graduates (27.3 %) had either completed an apprenticeship or a business school for their practiced profession. These women were corresponding to their training employed in business or in the field of tax consultancy.

Male graduates who at the beginning of their studies were employed had, in 19.3 % of the cases, already earned the title of a "Diplom Ingenieur" at a FHS. They worked mostly (53.1 %) as engineers or technicians (25.0 %) for the government. Every sixth male graduate (17.5 %) who had completed an apprenticeship had, in most cases, a profession in business (60.0 %) or they were employed by a bank/ insurance company (13.3 %). Twelve percent of the men had already earned the FHS degree of a "Diplom Betriebswirt" when they enrolled at the FeU. These graduates were in most cases employed in business related jobs (60.0 %) or in government jobs (20.0 %). In comparison to the women, the percentage of men who were employed in a job without occupational training (9.0 %) is clearly lower. Also, these graduates were mostly employed in business.

occupational training at tthe beginning of study	female	male	Diplom I	Diplom II	all
without	22.7	9.0	9.7	11.1	10.6
apprenticeship, business school	27.3	17.5	22.6	16.7	18.6
Dipl. Betriebswirt (FHS)	4.5	12.0	4.8	14.3	11.2
Diplom Kaufleute, Diplom Ökonom		.6	1.6		.5
Diplom Ing. (FHS)	4.5	19.3	11.3	20.6	17.6
Diplom Ing. (university)		3.0	4.8	1.6	2.7
other FHS degree		.6		.8	.5
other university degree		4.2	6.5	2.4	3.7
study without degree		1.8	1.6	1.6	1.6
exam for the career as civil servant	4.5	10.2	6.5	11.1	9.6
bank academy, administration academy	4.5	1.2	1.6	1.6	1.6
state examination		2.4	6.5		2.1
training as army officer		7.2	6.5	6.3	6.4
exam as tax consultant		.6	1.6		.5
exam for master crafts-man's or technician certificate	9.1	2.4	4.8	2.4	3.2
practical training		3.6	8.1	.8	3.2
abitur	4.5	.6		1.6	1.1
still in training	9.1	3.6	1.6	5.6	4.3
without statement	9.1			1.6	1.0
n	22	166	62	126	188

Table 46: Occupational Training of the Employed Graduates at the Beginning of Study

(in percent)

4.3 Present employment

In comparison to their fellow students at conventional universities the transition into professional life (Weber 1979) for the FeU graduates is, in general, less problematic because most of the graduates already had a job while studying at a distance. For some of the graduates therefore it is appropriate to ask: Do they now hold a higher position with Diplom degree of the FeU than they had before completing their study?

In the first half of 1985, when this research was carried out, only 3.3 % of the graduates said they were unemployed. Nearly every male graduate (91.0 %) and 44.2 % of the female graduates had a full-time job. Another 18.6 % of the women worked part-time but only 3 % of the men did so. Every fourth female graduate (23.3 %) was a housewife. In comparison to male graduates, female graduates were working not so often in a job.

Significant differences did not exist with respect to the earned Diplom but if the student category is taken into account then there are indeed differences. While 96.2 % of the male part-time students had a full-time job and a further 2.8 % were self-employed, "only" 86.0 % of the full-time students were in a full-time profession. Of the male full-time students, 6.5 % were unemployed when this survey was carried out.

The proportion of female full-time students who held a full-time job (48.3 %) is higher than the proportion for the female part-time students (35.7 %). Of the female full-time students, 17.2 %

student category	gender	scope of present employment							
		full-time	part-time	student	homemaker	unemployed	retired	self employed	n
full-time	female	48.3	17.2	3.4	20.7	3.7		6.9	29
	male	86.0	5,4	1.1		6.5		1.1	93
	all	77.0	8.2	1.6	4.9	5.7		2.5	122
part-time	female	35.7	21.4		28.6	7.1		7.1	14
	male	96.2					.9	2.8	106
	all	89.2	2.5		3.3	.8	.8	3.3	120
visiting	female								
	male	50.0	50.0						2
	all	50.0	50.0						2
total	female	44.2	18.6	2.3	23.3	4.7		7.0	43
	male	91.0	3.0	.5		3.0	.5	2.0	201
	all	82.8	5.7	.8	4.1	3.3	.4	2.9	244

Table 47: Scope of Present Employment

(in percent)

were working in part-time jobs and 21.4 % of the part-time students also worked part-time. In total, two out of three female graduates were currently employed.

Female graduates who were younger than 32 year, more often had full-time jobs (48.0 %) than the older women (38.9 %). For the male graduates the reverse was true. 95.6 % male graduates older than 31 were in full-time employment, as compared to 85.2 % men younger than 32. Within the younger age group, 6.8 % male graduates were unemployed but nobody out of the older group was. Only two female graduates (4.7 %) stated they were unemployed.

All graduates who were unemployed while studying at a distance now have full-time jobs. The qualifications they earned at the FeU have opened a new career for them. Currently unemployed graduates were not employed while studying.

Housewives who did not work in a paid job during their distance studies were, in 43.8 % of cases, in the same position after graduating. The research findings show that most of these housewives were looking for a job too. In the following section the problems the not employed students had in finding a first job after graduation have been reported.

4.3.1 Looking for a job

Nearly all graduates who did not work during their study were looking for a job after graduating (female graduates 92.9 %; male graduates 96.6 %). This fact is independent of the earned degree and age of student. Only 4.7 % of the female and 1.0 % of the male graduates were not looking for a job when this investigation was carried out.

Male graduates who were 32 year and older, regardless of the earned Diplom, often had (46.7 %) no problems at all in finding a job. Of the younger male graduates, the same was true only in 38.1 % of cases, but Diplom I graduates, especially less often (12.5 %) had no difficulties whatsoever while many Diplom II graduates (44.1 %) found few or no problems in obtaining employment. The male Diplom I graduates experienced a lot of difficulties (25.0 %) but this was true for only 15.6 % Diplom II gradu-

Diplom	gender	age at graduation	number of graduates not full-time or part-time employed or not self-employed during studies	looking for a job		those who were looking for a job had difficulties						
				no	yes	not at all	to some extent	to a great extent	until now no job offer	now self-employed	without statement	n
I	female	< 32	3	33.3	66.7				50.0	50.0		2
		≥ 32	2		100	50.0			50.0			2
		all	5	20.0	80.0	25.0			50.0	25.0		4
	male	< 32	8		100	12.5	12.5	12.5	37.5		25.0	8
		≥ 32	4		100	50.0		50.0				4
		all	12		100	25.0	8.3	25.0	25.0		16.7	12
	all	< 32	11	9.1	90.9	10.0	10.0	10.0	40.0	10.0	20.0	10
		≥ 32	6		100	50.0		33.3	16.7			6
		all	17	5.9	94.1	25.0	6.3	18.8	31.3	6.3	12.5	16
II	female	< 32	13		100	7.7	23.1	38.5	15.4	7.7	7.7	13
		≥ 32	10	10.0	90.0	33.3	11.1	33.3	22.2			9
		all	23	4.4	95.7	18.2	18.2	36.4	18.2	4.5	4.5	22
	male	< 32	36	5.6	94.3	44.1	26.5	17.6	5.9		5.9	34
		≥ 32	11		100	45.5	45.5	9.1				11
		all	47	4.3	95.7	44.4	31.1	15.6	4.4		4.4	45
	all	< 32	49	4.1	95.9	34.0	25.5	23.4	8.5	2.1	6.4	47
		≥ 32	21	4.8	95.2	40.0	30.0	20.0	10.0			20
		all	70	4.3	95.7	35.8	26.9	22.4	9.0	1.5	4.5	67
total	female	< 32	16	6.3	93.8	6.7	20.0	33.3	20.0	13.3	6.7	15
		≥ 32	12	8.3	91.7	36.4	9.1	27.3	27.3			11
		all	28	7.1	92.9	19.2	15.4	30.8	23.1	7.7	3.8	26
	male	< 32	44	4.5	95.5	38.1	23.8	16.7	11.9		9.5	42
		≥ 32	15		100	46.7	33.3	20.0				15
		all	59	3.4	96.6	40.4	26.3	17.5	8.8		7.0	57
	all	< 32	60	5.0	94.9	28.1	22.8	21.1	14.0	3.5	8.8	57
		≥ 32	27	3.7	96.3	42.3	23.1	23.1	11.5			26
		all	87	4.8	95.4	33.7	23.0	21.7	13.3	2.4	6.0	83

Table 48: Difficulties in Finding a First Job Experienced by Graduates not Employed During Studies
(in percent)

ates. Three out of eight Diplom I but only 5.9 % of the younger than 32 year old Diplom II graduates did not find a first job. The men attributed their failure to the fact that they were too old, the duration of studying was too long, and also the grade of the degree was not high enough. They also stated that the current labour market was also responsible for their failure because it is very difficult for professional, unexperienced graduates to find an adequate first job. These graduates supposed also that employers underestimate the worth of a FeU degree.

The following are some of the important comments from graduates about their difficulties in finding a job:

- *Because I had to look after a dependent, I had to slow down my study and and my grade in the subject 'Trade' was 'not satisfactory' I was turned down by all employers. I think, I am totally hopeless ever to find a job which is adequate to my academic background in economics. Also in non-academic jobs and in jobs which are at the educational level I had before I began to study, I always got rejections. I would be grateful if I could succeed once in achieving a modest way to earn a living.*

Female graduates encounter significantly more problems in finding a job than male graduates. Just 19.2 % women, who were not employed while studying, experienced no problems in finding a job. Moreso than for the men, the younger female graduates (6.7 %) less often than the older graduates (36.4 %) had no problems at all finding employment after completing their study. Every fourth (27.3 %) female graduate, 32 year and older, had great difficul-

ties finding a first job, but for those female graduates younger than 32 this was true for one in three (33.3 %). Of the female Diplom II graduates, 18.2 % were unsuccessful in finding a job, as were two out of four Diplom I graduates. The female graduates not employed but looking for a job were not willing to accept just any job because they thought the job should allow them on the one hand a specific subject content orientation and on the other hand the job should fit into their private/family life.

As it is seen, nearly all female graduates were looking for a job. While male graduates who did not find employment after graduation said they are unemployed, in general, the same was not true for the women. They explained that they are housewives. The label 'housewives' hides a lot of women who were looking for a job. Most of the women who did not have success in finding a job attributed this to their family situation and the fact that they are women. Therefore the following seems clear: it is especially the case that those women who, because their family situations had only the opportunity to study at a distance to obtain qualified professional training have, after completing their studies with a great deal of effort, new problems - namely finding a first job. The reason for these problems is certainly the relatively low rate of mobility among these women, which hardly allows them to take up a job far away from their place of residence. The following comment from a female graduate illustrates very well the problems of a woman who is looking for a job:

- *For one and a half year, after completing my distance study, I have tried to find a job within the field of business. The reason for my failure had nothing to do with the FeU. The FeU*

was well-known nearly everywhere and I also received the recognition for the degree from the personnel manager. The rejections, as far as they generally gave an explanation, were due to my family situation (husband, three kids) and the current labour market. This unpleasant situation brought me into a difficult personal crisis. Six years of hard learning, for which I gave up my job and my income, were without reward.

If those housewives who were looking for a job are classified as unemployed (all male graduates did so, in general), the rate of unemployment among the women would rise to 18.6 %. In contrast to the unemployment rate of 3.0 % for the men it is obvious that the female graduates have even more difficulties in finding a first job, although they have the same formal qualifications. This unemployment can "be considered as a belated damper, who made a decision for a qualified educational training and to practice this in a lifelong occupation with high responsibility" (Biermann & Ziebell 1983, p. 26). In comparison to the female graduates, the male graduates - with some exceptions - were accepted in the labour market. This can be considered as a very positive sign of the worth of the study at the FeU for men. In comparison to graduates of conventional universities the unemployment rate of graduates of the FeU is, in general, relatively low.

4.3.2 Field of activity

Currently employed female graduates (30.0 %), as well as male graduates (27.8 %), were in many cases in the field of business. The proportion of women who are teaching in public or private ed-

ucational institutions (20.0 %) or at universities (10.0 %) is high. The male graduates were less often employed as teachers (2.6 % or 3.3 % respectively). Every fifth employed female Diplom II graduate (22.2 %) but just every ninth male Diplom II graduate (11.4 %) found a consulting job (tax or management consultant, accountant). Male graduates preferred computer jobs or jobs as technical clerks (10.9 %), while this was true only for one female graduate (3.3 %). Every seventh man (14.4 %) worked within the administration of the government, and every ninth (10.8 %) was an engineer or natural scientist. After completing their distance study in economics, these male graduates preferred to work in their original profession.

present field of activity	female	male	Diplom I	Diplom II	all
business, trade	30.0	27.8	27.7	28.3	28.1
bank/insurance clerk	6.7	8.8	6.2	9.4	8.5
technical/computer clerk	3.3	10.8	12.3	8.8	9.8
consultancy	20.0	12.4	13.9	13.2	13.4
government non-administ.	3.3	3.6	1.5	4.4	3.6
government administrat.	6.7	14.4	15.4	12.6	13.4
teacher (public, priv.)	20.0	2.6	4.6	5.0	4.9
university	10.0	3.6		6.3	4.5
military service		3.1	3.1	2.5	2.7
engineer, natural scien.		10.8	12.3	8.2	9.4
others		2.1	3.1	1.3	1.8
n	30	194	65	159	224

Table 49: Present Field of Activity of Employed Graduates

(in percent)

Two out of three female graduates (65.1 %) had the impression that the degree of the FeU opened a new career to them. Only 43.3 % of the male graduates had a similar impression but a further 39.3 % were thinking that it is now easier for them to achieve partly a new career (23.3 % of the female graduates).

It is an exception if the chosen specialization subject and the present field of activity of the graduates corresponded completely (5.8 %). A further 27.2 % of the respondents report that it corresponds to a great extent. For 43.3 % of the graduates there is only a relation to some extent between their chosen specialization subject and their everyday work. This is more often true for the women (56.7 %) than for the men (41.2 %).

Nearly every fourth graduate (22.8 %) explains that there is no connection at all between the course of studies and their work. First of all this is more often true for men (24.2 %) than for women (13.3 %).

correspondence of the study specialization with the current job	female	male	Diplom I	Diplom II	all
completely	6.7	5.7	6.2	5.7	5.8
to a great extent	23.3	27.8	23.1	28.9	27.2
to some extent	56.7	41.2	49.2	40.9	43.3
not at all	13.3	24.2	20.0	23.9	22.8
no statement		1.0	1.5	.6	.4
n	30	193	65	159	224

Table 50: Correspondence of the Study Specialization with the Current Job

(in percent)

Graduates who saw only some or no congruence between their subject of specialization and their present job, in most cases were working for the government or as an engineer. A close relation existed for those graduates who were working in banks or insurance companies or universities. Those graduates who worked as consultants or who were employed as technical clerks, in general, more often saw a connection between their current work and their study specialization than is the case in the reverse situation.

Three out of four graduates (77.7 %) have the opportunity to use some of the knowledge gained from their study in their jobs. Two subjects stand out especially: knowledge in legal rights or of the optional/supplementary subject 'Business Law' (44.4 %), and knowledge from the required core subject in 'Business Administration' (38.8 %). Nearly every fourth graduate (23.6 %) said that the knowledge of 'Accounting' (a subject in the initial stage of studies) were very useful in everyday work. Less often the graduates were able to use their knowledge of the specialized subjects 'Marketing'/'Trade' (15.2 %), 'Tax of Business Administration' (13.5 %) and 'Finance' (12.4 %). For 11.8 % of the respondents, 'Statistics' was relevant in their professional work.

use of earned knowledge at the FeU in the job	female	male	Diplom I	Diplom II	all
yes	86.7	76.3	83.1	75.5	77.7
no	13.3	23.7	16.9	24.5	22.3
n	30	193	65	159	224

Table 51: Use of Earned Knowledge at the FeU in the Present Job

(in percent)

4.3.3 Job position

Compared to the original job position of the graduates it can be emphasized that, in general, the number of higher positions held by the graduates has increased after getting a degree. Of the 36.7 % female graduates currently working as specialists/experts, 13.3 % are heads of departments and another 3.3 % were business managers. Of the total women, 6.7 % were now self-employed. Every sixth female graduate (16.7 %) held a job at senior level in civil service. Some of these women were working at a conventional university as an assistant lecturer temporary appointment.

Female graduates who, at the beginning of their studies, were in the position of a specialist/expert, in 57.1 % of cases were currently in the same position, but 21.4 % were now in the higher position of a head of department.

Male graduates, in 29.9 % of cases, were in the position of a specialist/expert. Of the men, 14.9 % were in the position of a head of department/group leader, 2.9 % were leaders of an area of work, and 6.7 % were factory managers, business managers or attornies. Male graduates who worked for the government were more often in the professional/executive levels of civil service (11.9 %) than in senior levels of civil service (7.2 %). Graduates who completed Diplom I were more often (9.7 %) in senior levels of civil service than Diplom II graduates (6.1 %).

present job position	female	male	Diplom I	Diplom II	all
specialist, expert	36.7	29.9	27.7	32.1	30.8
head of department, group leader	13.3	14.9	12.3	15.7	14.7
leader of an area of work		2.6	3.1	1.9	2.2
factory/business manager, attorney	3.3	6.7	12.3	3.8	6.3
assistant	10.0	7.7	4.6	9.4	8.0
professional, executive levels of civil service	3.3	11.9	10.8	10.7	10.7
senior levels of civil service	16.7	7.2	9.2	8.2	8.5
without statement to the level of career as a civil servant	3.3	3.1		4.4	3.1
self-employed	6.7	3.1	7.7	1.9	3.6
others		2.6	1.5	2.5	2.2
without statement	6.7	10.3	10.8	9.4	9.8
n	30	194	65	159	224

Table 52: Present Job Position

(in percent)

Male graduates who, at the beginning of their study, were a specialist/expert, in 45.3 % of cases were also currently in this position. This was more often the case for Diplom I (55.0 %) than for Diplom II graduates (39.4 %).

Among the male graduates, 22.6 % were promoted to the position of head of the department, and this was more often the case among the more than 32 year old Diplom II graduates (40.0 %), while the same was true only for 15.0 % Diplom I graduates. In 57.1 % of cases those men employed as head of a department were also currently in the same position. 21.4 % each were now in the positions of a leader of an area of work or as factory manager, attorney. Promotion to factory manager, business manager or attorney was a success achieved exclusively by older Diplom I graduates.

Within the government, the "conditions of access and leaving as well as the conditions of promotion and career" (Blossfeld 1984, p. 164 f.) are regulated by law for the civil servants and by pay agreement for worker and public employees. As mentioned, at the beginning of their studies 16.0 % of the graduates had careers in the professional or executive levels of civil service (1.6 % and 14.4 % respectively). These graduates have studied with the expectation of promotion into the senior levels of civil service after completing their distance studies, although "the government offers for academics only the opportunity to work within a career of senior levels" (Blossfeld 1984, p. 166). Of 32 graduates who, during their studies, were in a career of executive level of civil service, six graduates completed Diplom I degree and the other 26 graduates Diplom II degree. Only Diplom II graduates have the formal qualifications which lead to a career in the senior levels of civil service. As a rule the civil servants have to complete additional time as trainees in the civil service. One graduate with Diplom I degree managed to obtain a promotion into the senior level of civil service after successfully completing a promotion exam, as did another four graduates with a Diplom II degree. In

two out of four cases the promotion was independent of their Diplom II degree, and in the other case the graduate completed time as a trainee in the civil service.

Altogether just 19 of the original 32 graduates were currently in a career at the professional/executive level in civil services (Diplom I 4; Diplom II 15). Because there were two additional Diplom II graduates who began a job in the executive level of civil service (employment bureau), there were altogether 17 graduates (16 men and one women) who did not find an "opportunity to get a job in the senior levels of civil service" (Blossfeld 1984, p. 166) which would correspond to their educational training. For this reason it is to note that now in the career of executive levels of civil service there is a process of displacement by academic qualification "of people with a Abitur, Fachabitur and grad-

Diplom	career at the beginning of their studies	present job in the government			quitted the governmental job	n
		professional levels of civil service	executive levels of civil service	senior levels of civil service		
I	executive levels of civil service		66.7	16.7	16.7	6
II	professional levels of civil service	33.3		33.3	33.3	3
	executive levels of civil service		60.0	17.4	21.7	23
	all	3.8	53.8	19.2	23.1	26

Table 53: Career Changes in the Civil Services Amongst the Graduates who were in Civil Service at the Beginning of their Studies

(in percent)

uates of the Fachhochschule" (Blossfeld 1984, p. 166). Of the 26 Diplom II graduates who, at the beginning of their studies, were in careers in the professional/executive levels of civil service, six (23.1 %) graduates considered the consequences of the bad promotion prospects for academics working for the government. They found new jobs and gave up their careers as civil servants.

Of the fifteen Diplom II graduates who had careers in the professional or executive levels of civil service 86.7 % tried to upgrade their positions. It seems that these graduates cannot realize their plans within the next few years. For this reason 60,0 % of these graduates have now very firm plans to change their job. Just one graduate (6.7 %) thinks that a university degree is absolutely necessary for his work. None of the graduates who were civil servants were of this opinion that their degrees brought them occupational advancement. Every fourth graduate (26.7 %) out of this group thought that the degree was more a hinderance with respect to career opportunities, while 73.3 % said there was no effect at all, either positive or negative.

Most Diplom II graduates who were employed during their studies in the professional or executive levels of the civil service found, after graduation, that the degree did not open further career prospects. This is surprising because it is generally known that so-called qualified staff, who do not have the formal requirements for a career of the senior levels of the civil service, just reached this goal in the last few years with the help of promotion exams and promotion tests. It seems that there is no recognition of the academic qualifications of Diplom II graduates because even after earning their Diplom they were in careers below the senior

levels of civil service. If these graduates fail to upgrade their positions within the next few years, it would only be fair in the future to warn potential students who are working for the government not to study at a distance if their sole motivation for getting a degree is their hope of promotion.

Below are cited some interesting comments of the graduates working in civil services to make the whole situation more clear:

- *As civil servant in a career at the executive level in telecommunications in the 'German Federal Railway', I can only make use of my university degree if I seek promotion into the career of senior levels of civil service. Because of rationalization reasons this is now impossible, so that I have perhaps to change the job as I see very restricted chances for promotion here.*

- *A change of employment was and is still possible. In this regard, many times I have had the bitter experience that the higher qualification would not be recognized; especially in my case the government practices the procedure that a higher position as civil servant is possible exclusively if I complete time as a trainee for the senior levels in civil service.*

- *The management argued that I am too old when they heard that I earned the Diplom at the FernUniversität.*

- *I work for the government (professional levels of civil service) and I would like to be promoted into the senior levels of civil service, but I find here only jurists and high snobbishness and as such I being a non-jurist find no recognition. Further the civil service regulations make it more difficult to take the state examination.*

- *On the basis of study and earning a Diplom it was impossible to improve my occupational goals (too old, employer not interested, too narrow regulation of careers as a civil servant which restricted promotion). A lot of energy was ignominiously wasted!*

- *Although I received a lot of help and assistance from my immediate colleagues, the employer (personnel department) was very reserved and rejecting. During the study program everything was avoided to derive no later right of promotion. While other colleagues and colleagues of other employers got extra holidays for sitting the exams my request was rejected indicating that there was no official interest at all. When I presented my Diplom certificate the personnel department passed over it in silence. My personal endeavor to use the new earned qualifications adequately were answered with the statement: 'We thank you for your willingness to work for the Bundeswehr administration.' I cannot count on a transfer or a promotion in my present career because the personnel department fears that I could change jobs in the future. A change of job into private industry is impossible because there the*

starting salaries are considerably lower than my present income. By the way I am 45, an age where I do not have a chance compared to younger fellow applicants.

Was my study completely pointless?

Although with respect to my professional career my study developed more and more to be a failure, on the other hand it brought me a lot in my private life: independent of broadening my knowledge and horizon, in general my study made it possible for me to solve some questions in economics by myself, which were not directly taught at the FernUniversität. Besides that I learned and practiced work habits during study that were very worthwhile.

4.3.4 Branch of industry, business

Just 29.8 % of the currently employed graduates were working for the government. Of those male graduates who were employed for the government or in a public institution most of them (11.9 %) were working within the administration. A further 5.2 % were working for the Federal Railway/Federal Mail. 3.6 % of the men were employed in each of the universities or in military service. Female graduates who found a job in the government were in most cases employed at universities, schools or in the public administration (each 10.0 %). In general, the proportion of graduates in the administration or in military service was decreasing while on the

branch of industry, business of present employment	female	male	Diplom I	Diplom II	all
industry, research		2.6	4.6	1.3	2.2
industry, development	3.3	13.4	16.9	10.1	12.1
industry, business	16.7	14.4	10.8	16.4	14.7
building and construction industry	3.3	2.1	4.6	1.3	2.2
trade	10.0	10.3	12.3	9.4	10.3
federal railway, federal mail		5.2	1.5	5.7	4.5
aviation	3.3	2.6	3.1	3.8	3.6
banks, insurances	6.7	11.9	7.7	12.6	11.2
schools	10.0	1.6	4.6	1.9	2.7
publishing	3.3	1.6	1.5	1.9	1.8
health service		2.1	3.1	1.3	1.8
legal advising, business consultance	16.7	8.2	7.7	10.1	9.4
laboratory		.5		.6	.4
parties, associations	6.7	1.0		2.5	1.8
administrat. of justice		1.5	3.1		1.3
military service		3.6	3.1	3.1	3.1
government	10.0	11.9	12.3	11.3	11.6
universities	10.0	3.6		6.3	4.5
others		1.0	3.1		.9
n	30	194	65	159	224

Table 54: Branch of Industry/Business of Present Employment

(in percent)

other hand the proportion of graduates at universities was increasing. Most of the graduates who were employed at a university have, with some exceptions, a time limited appointment.

Every sixth employed female graduate (16.7 %) works in business or in legal advising or business consulting which was relatively adequate with respect to their educational training.

Compared with the governmental branch, most of the male graduates, after completing their study, were employed in a branch which has a close connection to their educational qualification. 14.4 % men were employed in business, Diplom II graduates (17.3 %) more often than Diplom I graduates (8.2 %). The employment situation at banks and insurance companies is very similar because 13.5 % Diplom II, but only 8.2 % Diplom I graduates found a job in this branch. In the area of legal advising and business consulting there were no significant differences with respect to the earned degree; 8.2 % of the employed men worked here. 13.1 % Diplom I graduates chose 'Trade' and 18.0 % chose 'Industrial development', on the contrary only 9.0 % preferred 'Trade' and 11.3 % 'Industrial development'. A great diversity of job preferences are observable, the graduates were employed not only as engineers/natural scientists but also as employed technical clerk, accountant or consultant, etc.

4.3.5 Occupational training

Employed male graduates (51.0 %) significantly less often (Chi square = 10.88, DF = 4, sig. = .028) than the female graduates (70.0 %) consider their FeU degree as a relevant qualification for their present jobs. Every seventh male graduate (14.9 %) stated that his occupational training was a degree of a FHS and a further 9.3 % said that it was another university degree. 22.2 % of the male graduates stated they had another occupational training.

occupational qualification for the present job	female	male	Diplom I	Diplom II	all
without occupational qualification	10.0	2.6	4.6	3.1	3.6
apprenticeship, business school		5.2	6.2	3.8	4.5
Dipl. Betriebswirt (FHS)	3.3	4.6		6.3	4.5
Diplom Kaufleute, Diplom Ökonom		.5	1.5		.5
Diplom Ökonom I (FeU)	3.3	11.3	35.4		10.3
Diplom Ökonom II (FeU)	66.7	39.2		60.4	42.9
Diplom Ing. (FHS)		9.8	6.2	9.4	8.5
Diplom Ing. (university)		2.1	4.6	.6	1.8
other FHS degree		.5		.6	.5
other university degree	3.3	3.6	7.7	1.9	3.6
study without degree		1.0	1.5	.6	.9
exam for the career as civil servant		7.2	9.2	5.0	6.3
bank academy, administration academy		.5	1.5		.5
state examination	3.3	3.6	7.7	1.9	3.6
training as army officer		2.1	3.1	1.3	1.8
exam as tax consultant	3.3	.5	1.5	.6	.9
exam for master craftsman's or technician certificate	3.3	.5	1.5	.6	.9
practical training		3.1	4.6	1.9	2.7
practice		1.6	3.1	.6	1.3
others	3.3			.6	.5
n	30	194	65	159	244

Table 55: Occupational Qualification for the Present Job

(in percent)

While for the female graduates the degree of the FeU was in general relatively independent of their age, and the relevant professional qualification, this was however, not true for the male graduates. The younger than 32 year old male graduates said in 72.0 % of the cases (Diplom II 77.8 %; Diplom I 50.0 %) that the degree they earned at the FeU was the most relevant educational qualification for their present job. The same was true only for every third male graduate (35.7 %) aged 32 year and older. The older Diplom I graduates had, in 34.9 % of the cases, a occupational training which they did not earn at a FHS or a university; the corresponding proportion of the male Diplom II graduates were only 18.8 %.

qualifications earned for the present job	female			male			Diplom I			Diplom II			total		
	age group														
	< 32	≥ 32	all	< 32	≥ 32	all	< 32	≥ 32	all	< 32	≥ 32	all	< 32	≥ 32	all
FernUniversität qualification	72.2	66.7	70.0	72.0	35.7	51.0	50.0	27.9	35.4	78.2	44.4	61.0	72.0	38.7	53.6
Fachhochschul-qualification		8.3	3.3	3.7	23.2	14.9		9.3	6.2	3.8	28.4	16.4	3.0	21.8	13.4
other university qualification	5.6	8.3	6.7	3.7	13.4	9.3	13.6	25.6	21.5	1.3	6.2	3.8	4.0	12.9	8.9
other occupational qualification	11.1	8.3	10.0	18.3	25.0	22.2	27.3	34.9	32.3	14.1	17.3	15.7	17.0	23.4	20.5
without occupational qualification	11.1	8.3	10.0	2.4	2.7	2.6	9.1	2.3	4.6	2.6	3.7	3.1	4.0	3.2	3.6
n	18	12	30	82	112	194	22	43	65	78	81	159	100	124	224

Table 56: Qualification Earned for the Present Job

(in percent)

Female graduates not only considered their FeU degree as the most relevant qualification for their present job but they were also convinced more often (46.7 %) than men (37.6 %) that a Diplom is absolutely necessary to do the work in their jobs. Every third male graduate (33.5 %), but only every fourth female graduate (26.7 %), stated that the present job did not need a university degree. A simple question that comes to mind is that: do working women in comparison to men have the more qualified occupations or do they need higher qualifications to start a new job? Female

working experience	necessity of a university degree for the present job	female	male	Diplom I	Diplom II	total
yes	essential	61.1	35.2	30.0	43.5	41.7
	a help, but not strictly necessary	16.7	29.6	30.0	25.8	26.4
	not essential	22.2	29.6	30.0	27.4	27.8
	without statement		5.6	10.0	3.2	4.2
	n	18	54	10	62	72
no	essential	25.0	38.6	38.2	37.1	37.5
	a help, but not strictly necessary	41.7	24.3	25.5	25.8	25.7
	not essential	33.3	35.0	36.4	34.0	34.9
	without statement		2.1		3.1	2.0
	n	12	140	55	97	152
all	essential	46.7	37.6	36.9	39.6	38.8
	a help, but not strictly necessary	26.7	25.8	26.2	25.8	25.9
	not essential	26.7	33.5	35.4	31.5	32.6
	without statement		3.1	1.5	3.1	2.7
	n	30	194	65	159	224

Table 57: Necessity of a University Degree for the Present Job

(in percent)

graduates of the FeU are more often beginners in their jobs than are the men. It is a well-known fact (Schmerl et al 1983) that female beginners, in general, need a higher qualification to get a job than it is the case for the men.

The results of the survey also confirm this because 61.1 % of the female beginners have indicated that they thought the Diplom is absolutely necessary for their job. The same was true only for every third male graduate (35.2 %). No significant gender related differences exist within the group of graduates who were employed while studying at a distance.

4.4 Change of job

In the following section the type of job changes experienced by the graduates are described. The analysis is made of the information about the kind of promotion compared to the job held previously. A job change has taken to mean: Any change of employer; any substantial change in the nature of duties; promotion; any change of status or retirement; becoming a full-time homemaker or return to paid employment. For the sake of clearity in judging the differences in job changes amongst those beginning the employment and those already in employment, the analysis has been done separately for these two groups.

4.4.1 Job changes among previously employed graduates

Of the graduates who were employed during their distance studies, 42.0 % changed their jobs shortly before or after completing their study programs. Female graduates changed their jobs more often (53.3 %) than male graduates (40.8 %), and Diplom I graduates less often (38.2 %) than Diplom II graduates (44.1 %). If the data is differentiated according to the age of the graduates, then it is very clear that the younger than 32 year old graduates (56.6 %) changed their jobs significantly more often than the older graduates (34.6 %). The strongest differences were within the group of Diplom II graduates - 63.2 % who were younger than 32 year old, but only 32.8 % of the older graduates changed their jobs at least once after completing their studies.

number of job changes	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
1	53.3	40.8	38.2	44.1	56.6	34.6	42.0
2	20.0	7.7	3.6	11.8	15.1	5.8	8.9
3	6.7	3.5	1.8	4.9	7.5	1.9	3.8
n	15	142	55	102	53	104	157

Table 58: Number of Job Changes Amongst Graduates Employed During Study

(in percent)

A group of 8.9 % changed their jobs a second time and 3.8 % changed their jobs a third time. The age of the graduates is an imortant factor in relation to second and third changes of jobs. Younger graduates more often changed jobs than the older graduates, especially in the case of those completing their studies with a Diplom II degree (two job changes: younger than 32 year old 21.1 %, 32 year and older 6.3 %; three job changes: younger than 32 year old 10.5 %, 32 year and older 1.6 %).

The first change of job was especially of a fundamental nature for the younger graduates because for these graduates the change from their previous jobs was radical (63.3 %) in the sence that they changed to a new career/new field (50.0 %), in another company/organization (36.7 %), or in another industry (30.0 %). The more than 31 year old graduates changed to a new career/new field more often than the average within the same company (27.8 %). They were more successful in these subsequent jobs in gaining promotion (25.0 %) than was the case for the younger graduates (6.7 %).

Differences existed not only with respect to age of the graduates but also with respect to the kind of Diplom they earned. Diplom II graduates more often (44.4 %) began a new career than Diplom I graduates (28.6 %) while changing jobs (37.8 %). In contrast to that, the older Diplom I graduates had more success in being promoted within the company (33.3 %) than it was the case for Diplom II graduates (19.1 %).

The degree of the FeU brought promotion more rapidly to the older graduates (58.3 %) than to the younger graduates (43.3 %). The differences between the graduates by the kind of Diplom were significant. While 57.1 % Diplom I graduates were promoted when changing jobs, the same was true only for 48.9 % Diplom II graduates. In this regard it is noticeable that there is a significant difference between the older (61.9 %) and younger (37.5 %) Diplom II graduates.

The first job change was mainly positively regarded because most of these graduates now have better intrinsic motivation at work (75.8 %), a better chance for promotion or other advancement, or the opportunity to use the knowledge and skills of their qualifications (each 32.7 %). No less important is the fact that their pay increased (69.7 %) and as well they have the opportunity to assume more responsibility (66.7 %).

In one point only, there was no significant improvement: only 18.2 % of the graduates who changed their jobs now have a job with better security, while on the other hand 28.8 % were in the opposite position, their present jobs are less secure compared to the

change of job changes	change of job characteristics	female	male	Diplom I	Diplom II	age when graduating		all
						< 32	≥ 32	
types of changes	change to a new career/new career	50.0	37.9	28.6	42.9	50.0	30.6	39.4
	change of employer/organization	37.5	34.5	28.6	33.3	36.7	33.3	34.9
	change of industry	12.5	31.0	19.1	33.3	30.0	27.8	28.8
	promotion within the same organization	25.0	15.5	23.8	13.3	6.7	25.0	16.7
	promotion within a career structure	12.5	15.5	14.3	23.8	6.7	22.2	15.2
promotion	accelerated promotion - early due to FernUniversität qualification	62.5	50.0	57.1	48.9	43.3	58.3	51.5
	promotion normal for someone of my age and experience	12.5	22.4	14.3	24.4	20.0	22.2	21.2
	accelerated promotion - early for other reasons	12.5	6.9		11.1	13.3	2.8	7.6
change of career	a radical change from previous jobs	75.0	50.0	33.3	62.2	63.3	44.4	53.1
	a natural development from previous jobs	25.0	29.3	38.1	24.4	20.0	36.1	28.8
	a change I cannot easily reverse	62.5	43.1	38.1	48.9	43.3	47.2	45.5
	an experiment that could be reversed	25.0	19.0	14.3	22.2	16.7	22.2	19.7
new job compared to the previous one	better intrinsic interest of the work	87.5	74.1	66.7	80.0	76.7	75.0	75.8
	better chance for promotion or other advancement	75.0	72.4	66.7	75.6	73.3	72.2	72.7
	better chance to use knowledge, skills qualifications	87.5	70.7	61.9	77.8	70.0	75.0	72.7
	better pay	62.5	70.7	66.7	71.1	66.7	72.2	69.7
	better chance to take responsibility	87.5	63.8	66.7	66.7	73.3	61.1	66.7
	more security of the job	12.5	19.0	14.3	20.0	13.3	22.2	18.2
part of FeU qualification to get the job	a help	50.0	41.4	52.4	37.8	20.0	61.1	42.4
	essential for it	37.5	31.0	19.1	37.8	53.3	13.9	31.8
	irrelevant	12.5	17.2	19.1	15.6	16.7	16.7	16.7
n		8	58	21	45	30	36	66

Table 59: Details of First Job Changes Amongst Graduates Employed during study

(in percent)

previously held jobs. Obviously there must be factors than those mentioned that are so important that the graduates would accept the risk of reduced job security for a change.

For every fifth graduate (19.7%) the job change was only an experiment that could be reversed at any time, but for nearly every second graduate (45.5 %) the change cannot easily be reversed because they made a radical change from their previous jobs.

In general, for the younger graduates the FeU Diplom was essential (53.3 %) for getting a job. For the older and therefore more professionally experienced graduates, the Diplom was more of a help (61.1 %) when they changed jobs. In 13.9 %, the graduates considered the Diplom less essential and 16.7 % thought the degree was not necessary for getting a job.

Those graduates who were employed while studying and who changed jobs a second time after earning a degree in many cases began a job in another branch of industry or left paid employment (35.7 % each). For the younger than 32 year old graduates, the major consequence of changing jobs was better payment (62.5 %). For the older graduates it was more important to better their chances for increasing their responsibility or their opportunity to use knowledge und skills gained from the earned qualifications (five of six graduates each).

For the graduates who changed jobs a third time after completing their study, it is noteworthy that they changed the employer/organization but remained in the same professional area (four out of

six graduates). The new positions were mostly a natural development from previous jobs (five out of six graduates). In general, with the third change of job the graduates bettered their occupational positions.

4.4.2 Job changes amongst graduates who were not employed while studying

The graduates who were not employed while studying at a distance and who found a job after earning a degree changed jobs once in one out of four cases (26.4 %), 8.3 % changed jobs a second time. Female graduates changed jobs more often than male graduates, and older graduates more often than younger graduates.

number of job changes	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
1	40.0	21.2	18.27	27.9	24.5	30.4	26.4
2	10.0	7.7		9.8	6.1	13.0	8.3
n	20	52	11	61	49	23	72

Table 60: Number of Job Changes Amongst Graduates who were not Employed During Study

(in percent)

Before a discussion of the job changes amongst the graduates who were not employed during the studies can be made, it is necessary to point out that all of them started a fresh job immediately

after graduation and as such they were unable to respond to the job change items in the questionnaire. Essentially these graduates are below 32 year age.

Table 61 shows clearly every second male graduate (48.1 %) and nearly every second more than 31 year old graduate (47.8) got a new job because they indicated that they now work in a different branch of industry. Female graduates (16.7 %), as well as young graduates (25.0 %), less often worked in a different industry after they began to work again.

Every second graduate (51.3 %) who was not employed while studying at a distance made a radical change from their previous jobs. This was especially true for Diplom I graduates (75.0 %), for the more than 31 year old graduates (60.9 %) and for women (58.3 %). The older graduates feel that their job changes cannot easily be reversed (47.8 %) while the same was true for every eight younger graduate (12.5 %).

The graduates now report that they have a chance to use their knowledge, skills, qualifications (66.7 %) in their jobs. The same proportion of the graduates received better payment. Both Diplom I and younger female graduates (75.0 % each) received most of the employment benefits.

In comparison to graduates who were employed while studying at a distance, it is remarkable that the not employed graduates indicated much less agreement with the each statement describing their

change of job changes	change of job characteristics	female	male	Diplom I	Diplom II	age when graduating		all
						< 32	≥ 32	
types of changes	change to a new career/new career	66.7	59.3	75.0	58.1	62.5	60.9	61.5
	return to paid employment	41.7	51.9	62.5	45.2	31.3	60.9	48.7
	change of industry	16.7	48.1	75.0	29.0	25.0	47.8	38.5
	change of employer/organization	16.7	37.0	50.0	25.8	18.8	39.1	30.8
promotion	promotion normal for someone of my age and experience	33.3	25.9	37.5	25.8	31.3	26.1	28.2
	accelerated promotion - early due to FernUniversität qualification	25.0	29.6	25.0	29.0	31.3	26.1	28.2
change of career	a radical change from previous jobs	58.3	48.1	75.0	45.2	37.5	60.9	51.3
	a natural development from previous jobs	16.7	22.2	12.5	22.6	25.0	17.4	20.5
	a change I cannot easily reverse	25.0	37.0	50.0	29.0	12.5	47.8	33.3
	an experiment that could be reversed	41.7	25.9	37.5	29.0	37.5	26.1	30.8
new job compared to the previous one	better intrinsic interest of the work	58.3	66.7	62.5	64.5	68.8	60.9	64.1
	better chance for promotion or other advancement	50.0	55.6	62.5	63.0	50.0	56.5	53.8
	better chance to use knowledge, skills qualifications	66.7	66.7	75.0	64.5	62.5	69.6	66.7
	better pay	75.0	63.0	75.0	64.5	75.0	60.9	66.7
	better chance to take responsibility	50.0	44.4	62.5	41.9	56.3	39.1	46.2
	more security of the job	8.3	22.2	25.0	16.1	25.0	13.0	17.9
part of FeU qualification to get the job	a help	25.0	40.7	62.5	29.0	18.8	47.8	35.9
	essential for it	58.3	33.3	25.0	45.2	50.0	34.8	41.0
	irrelevant	16.7	7.4		12.9	6.3	13.0	10.3
n		12	27	8	31	16	23	39

Table 61: Details of the Previous Jobs which the Graduates gave off During their Studies

(in percent)

jobs. With earning the Diplom, they do not currently have so many positive effects in their new jobs as was the case for the graduates who worked while studying.

For 41.0 % of the graduates the earned degree was considered essential to get a job, and for a further 35.9 % graduates the Diplom was only a help. For female graduates, the Diplom was more often considered essential (58.3 %) for getting a job than was the case for male graduates (33.3 %). For them, the FeU qualification was more of a help (40.7 %).

As seen, a greater portion of the graduates who were not employed while studying have changed jobs at least once for promotion reasons. Graduates who changed jobs now work in a new branch of industry (42.1 %). One out of five (21.1 %) graduates who changed continued to work in the same company but they began working in a new field. In most cases (52.6 %) the change from the previous job was drastic and could not be easily reversed (47.4 %).

Compared to their first job after completing their studies, the graduates were attracted to the new job more because it was intrinsically more motivating and more paying (68.4 % each). The younger graduates, especially, received better pay (83.3 %) in their new jobs, while this was of secondary significance for the older graduates (42.9 %). For them, the better intrinsic motivation of the work (71.4 %) was a more dominant consideration. Just 42.1 % of the graduates who changed jobs thought that their promotion prospects were better than in their previous jobs. Comparing the security of the jobs, 31.6 % thought that their former jobs were better. For the female graduates, the FeU qualifications were

essential for getting a new job (62.5 %). The same was true only for every fourth male graduate (27.3 %). For most of the men, the Diplom was just a help to get the jobs.

4.5 Which characteristics should a potential job fulfill?

On the basis of a list of sixteen statements, the graduates were asked how important the stated job characteristics would be for them in considering a potential job. In the analysis of the data, all those statements which essentially asked the same thing were put together. In this way the original sixteen statements were reduced to six indicators of job characteristics.

The graduates were nearly unanimous (90.6 %) in their opinion that the indicator "satisfaction with the work" had the highest worth for a potential job. The graduates preferred variety in work duties or assignments and therefore the work must be intrinsically motivating. For most of the graduates (83.6 %), their wish to "work independently" was, most important. Three out of four graduates (73.4 %) would have liked to have executive duties in their jobs. Female graduates put less importance (60.5 %) on the possibility of assuming supervisory duties or on promotion prospects than is the case for the male graduates (76.1 %). The differences between the responses of the males and females are significant (Chi square = 4.442, DF = 1, sig. = .035). Rather than preferring to have "executive duties" in their jobs, the female graduates indicated significantly more often than the males (79.1 % to 62.2 %) that they would like to make good use of their qualifications (Chi square = 4.447, DF = 1, sig. = .035).

indicators of job characteristics	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
satisfaction with the work	93.0	90.1	90.3	90.7	93.8	87.8	90.6
independently work	90.7	82.1	84.7	83.1	80.5	86.3	83.6
executive duties	60.5	76.1	72.2	73.8	72.6	74.1	73.4
to make good use of the qualification	79.1	62.2	65.3	65.1	68.1	62.6	65.2
a good income	27.9	50.8	51.4	44.8	46.0	47.3	46.7
job security	39.5	36.8	40.3	36.1	36.3	38.2	37.3
n	43	201	72	172	113	131	244

Table 62: Importance of Job Characteristics for a Potential Job

(in percent)

There were significant gender specific differences on the question about the importance of "a good income" (Chi square = 7.423, DF = 1, sig. = .006). While every second male graduate (50.8 %) attached importance to well paid positions, the same was true only of a minority (27.9 %) of the women. For female graduates (39.5 %) "job security" was rated more highly than was the case for the men (36.8 %).

A supposition made in this investigation was that these typical, ideal requirements for a potential job were not always realized. In the following section an attempt has been made to investigate to what extent there is an agreement between the ideal job expectations and the present job situations of the graduates.

The graduates who rated the given job characteristics as 'very important', describe their present jobs more favourably according to these indicators than those who rated these characteristics as less relevant.

The graduates realized the goal of "working independently" to a great extent. Graduates who said that this goal was 'very important' in 77.1 % of cases had the opportunity to work independently, but the same was true only for 55.6 % of those graduates who did not have a preference for this goal. The difference was significant (Chi square = 7.248, DF = 1, sig. = .008).

For 9 out of 10 graduates the goal "satisfaction with the work" was 'very important' for a potential job. More than a quarter of the graduates had to lower their expectations with respect to achieving this goal in their present jobs because only 72.4 % stated that the original goal was realized. Female graduates are somewhat (75.0 %) better content with their work than the male graduates (72.0 %).

Females and males who preferred "executive duties", realized this goal in two out of three cases (64.7 % to 65.1 %). In contrast, the same was true for just 7.1 % of the female graduates who did not have this goal. On the other hand, 43.2 % of the males took responsibility for executive duties although this was not a goal for them.

indicators of job characteristics	female		male		Diplom I		Diplom II		age when graduating				all	
									< 32		≥ 32			
	very important	not very important	very important	not very important	very important	not very important	very important	not very important	very important	not very important	very important	not very important	very important	not very important
satisfaction with the work	75.0	33.3	72.0	44.4	74.6	33.3	71.5	46.7	69.2	66.7	75.2	33.3	72.4	42.9
independently work	75.0	33.3	77.5	57.6	80.4	44.4	75.8	59.3	76.3	55.0	77.8	56.3	77.1	55.6
executive duties	64.7	7.1	65.1	43.2	66.0	33.3	64.7	35.0	63.0	37.0	66.7	32.3	65.1	34.5
to make good use of the qualifications	80.0	33.3	60.8	43.8	67.4	36.4	62.8	45.6	62.7	39.4	65.4	45.7	64.1	43.0
a good income	50.0	19.1	54.1	48.4	63.6	59.4	49.3	41.9	41.3	42.6	63.3	50.0	53.8	46.6
job security	42.9	35.3	71.4	54.5	76.9	59.0	62.1	49.5	66.7	43.8	66.7	59.2	66.7	52.1

Table 63: Extent of Realization of the Job Characteristics in the Present Jobs

(in percent)

employed females stated they could "make good use of their qualifications" (80.0 %) in their present jobs compared to 60.8 % for the males. Nevertheless the men more often ended up better off than the women.

The differences between males and females were significant in the case of the indicator "job security" (Chi square = 4.284, DF = 1, sig. = .038). This goal was valued as 'very important' more often by the female graduates than by the male graduates. While 71.4 % of the male graduates who stated this was a 'very important' goal for them, realized this goal, the same was true for just a minority of the female graduates (42.9 %). But also those men, for whom the goal of job security was less important, in general, more often had a secure job (54.5 %) than was the case for the women (35.3%).

"A good income" was more often rated as important by the male graduates (54.1 %) than by the female graduates (50.0 %). In general, the proportion of graduates content with their incomes is less definitive than was the case for other job characteristics. Obviously, not all graduates realized their income expectations after completing their study.

4.6 Making use of the FeU qualifications

Independent of whether the graduates have changed their job or not, three out of four graduates (75.4 %) have tried to make use of their FeU qualifications for purposes of job change, getting a job, promotion. etc. This was somewhat less often the case for fe-

males (69.8 %) than for males (76.6 %). Graduates who have tried to make use of their qualifications had in most cases (62.5 %) no advantage of their FeU degree. The degree was reported to be of an advantage by 20.7 % of the graduates, male graduates (22.7 %) more often than the female graduates (10.0 %). Every eighth graduate (13.0 %) reports, he/she had to accept disadvantages because their degree was a degree of the FeU. Female graduates reports more often (20.0 %) about disadvantages than it was the case of male graduates (11.7 %).

Graduates who used their qualifications changed the job in two out of three cases (64.7 %). This was especially true for female graduates (76.7 %) or younger than 32 year old graduates respectively (73.3 %), while the same was true only for every second (56.4 %) older graduate.

4.7 Planned changes of work

The majority (58.9 %) of the currently employed graduates planned to change the type of work they do at present, either through promotion within the present company (24.1 %) or through a change of employer (29.0 %) or through a combination of promotion and work change (5.8 %). Female graduates were obviously more content with their employment than the male graduates because they significantly less often (43.3 % vs 61.3 %) planned for a change of work (Chi square = 4.057, DF = 1, sig. = .044).

plans to change the type of job	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
no plans	56.7	38.7	46.2	39.0	38.0	43.6	41.1
yes, promotion	16.7	25.3	26.2	23.3	22.0	25.8	24.1
yes, change of job	23.3	29.9	24.6	30.8	32.0	26.6	29.0
yes, promotion and change of job	3.3	6.2	3.1	6.9	8.0	4.0	5.8
n	30	194	65	159	100	124	224

Table 64: Plans of the Employed Graduates to Change the Type of Work

(in percent)

Male graduates who plan to change their jobs report in 56.3 % cases that they have very clear ideas in their minds about what field of work they would like in the future, while the same is true only for 38.5 % of the females. Diplom I graduates have the clearest plans about their desired field of work (65.7 %) followed by the older graduates (62.9 %).

ideas of the kind of work in the future	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
very clear, I have a particular kind of job in mind	38.5	56.3	65.7	50.5	45.2	62.9	54.5
fairly clear, I have decided in general terms	30.8	31.9	34.3	30.9	37.1	27.1	31.8
not very clear at the moment	23.1	9.2		14.4	12.9	8.6	10.6
without statement	7.7	2.5		4.1	4.8	1.4	3.0
n	13	119	35	97	62	70	132

Table 65: Ideas about the Kind of Job of Graduates who Plan to Change

(in percent)

Three out of four graduates who found it 'very important' to be "satisfied with the work" (78.2 %) or to "work independently" (76.2 %), but whose jobs did not ensure this, planned to change the type of their work. The most pronounced wish for change, if these two factors were not fulfilled, was expressed by Diplom I graduates (92.9 % vs 100 %). The female graduates very rarely expressed this wish (each 57.1 %). Those graduates who could not "make good use of their qualifications" in their job (73.1 %), who have no "executive duties" (71.9 %) or who have no "good income" (70.8 %) were also planning a change of job either through changing the company they work for or through promotion within the

factor of job characteristics	very important for a job	female		male		Diplom I		Diplom II		age when graduating				total	
										< 32		≥ 32			
		realization in the present job													
		yes	no	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
satisfaction with the work	yes	38.1	57.1	57.9	81.3	47.7	92.9	58.2	73.2	53.8	85.7	56.1	70.4	55.1	78.2
	no	0	50.0	12.5	50.0	0	25.0	14.3	62.5	25.0	50.0	0	50.0	11.1	50.0
independently work	yes	33.3	57.1	58.9	80.0	53.3	100	56.0	68.8	59.0	83.3	52.4	70.8	55.2	76.2
	no	100	50.0	42.1	64.3	0	20.0	56.3	81.8	36.4	66.7	55.6	57.1	45.0	62.5
executive duties	yes	18.2	50.0	63.9	74.5	64.5	73.3	57.1	71.4	52.2	80.8	64.5	64.5	59.3	71.9
	no	0	61.5	36.8	44.0	16.7	25.0	42.9	61.5	50.0	64.7	20.0	38.1	35.0	50.0
to make good use of the qualifications	yes	40.0	40.0	52.0	76.6	48.3	92.9	50.0	65.8	50.0	72.0	49.0	74.1	49.5	73.1
	no	50.0	50.0	53.1	67.5	25.0	46.1	61.5	74.2	53.8	78.9	52.4	56.0	52.9	65.9
a good income	yes	50.0	50.0	54.7	72.7	42.9	72.7	61.1	70.3	52.6	69.2	55.3	72.7	54.4	70.8
	no	22.2	50.0	54.4	65.3	47.4	69.2	50.0	60.0	56.5	64.5	43.8	59.4	49.1	61.9
job security	yes	33.3	37.5	62.3	50.0	55.0	33.3	61.1	50.0	50.0	58.3	65.6	37.5	58.9	46.4
	no	83.3	27.3	62.7	63.6	60.9	53.3	66.0	58.8	75.0	60.0	57.8	54.8	63.9	57.6

Table 66: Plans of Employed Graduates to Change the Type of Work

(in percent)

company. The current "job security" was a less important factor in the graduates' plans to change the type of work they do. Merely 46.4 % of the graduates who mentioned that "job security" was 'very important' for them, but where the job did not fulfill their expectations in this respect, have plans to change their line of work.

4.8 Development of income

Although "self-assesments of fixed income class sizes are only usefull with certain reservations" (Statistisches Bundesamt (Gro.) 1973, p. 196), nevertheless in this investigation the graduates were asked to give their annual before-tax income. These data provide some indication of the development of the graduates' incomes during and after completing the distance study program. As Krupp (1979) emphasized, "we have to take a class size bias into account. The investigation of reported income details by class sizes leads to different results in comparison to the question of the absolute numbers. The order of magnitude of this error we can estimate. The direction is different, however, for various social stratifactions" (p. 214). Because the graduates in this study maybe seen as a relatively homogeneous group the error should not be significant.

The income structure shows significant gender (Chi square = 25.129, DF = 8, sig. = .001) and age (Chi square = 86.625, DF = 8, sig. = .000) differences. While every second female graduate

annual before-tax income	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
without income	48.8	18.4	18.1	26.2	40.7	9.2	23.8
less than 20,000 DM	14.0	9.0	6.9	11.1	17.7	3.1	9.8
20,000 - 34,999 DM	14.0	18.4	16.7	18.0	23.0	13.0	17.6
35,000 - 49,999 DM	18.6	23.9	20.8	23.8	12.4	32.1	23.0
50,000 - 64,999 DM	2.3	15.4	16.7	11.6	3.5	21.4	13.1
65,000 - 79,999 DM		8.0	9.7	5.2		12.2	6.6
80,000 - 99,999 DM		2.0	4.2	.6		3.1	1.6
100,000 DM and more		1.5	1.4	1.2		2.3	1.2
without statement	2.3	3.5	5.6	2.3	2.7	3.8	3.3
n	43	201	72	172	113	131	244

Table 67: Annual Before-tax Income (in DM) of the Graduates at the Beginning of their Study

(in percent)

(48.8 %) had no income of her own at the beginning of study, the same was true for just 18.4 % of the males. Younger graduates were more often without income (40.7 %) than older graduates (9.2 %).

Every fourth male graduate (27.4 %) and female graduate (28.0 %) had a annual before-tax income of less than 35,000 DM. The higher levels of income were dominated by the men. An annual income of 35,000 to 64,999 DM was received by 39.3 % men; a further 10.0 % had an income between 65,000 DM and 99,999 DM, and 1.5 % earned 100,000 DM and more a year. There were no female graduates in the income group of 65,000 DM and more. Every fifth female graduate (20.9 %) had an income between 35,000 DM and 64,999 DM.

annual before-tax income	female	male	Diplom I	Diplom II	age when graduating		all
					< 32	≥ 32	
without income	55.8	21.4	20.8	30.0	43.4	13.7	27.5
less than 20,000 DM	20.9	9.5	6.9	13.4	19.5	4.6	11.5
20,000 - 34,999 DM	7.0	5.5	5.6	5.8	8.9	3.1	5.7
35,000 - 49,999 DM	7.0	13.9	9.7	14.0	12.4	13.0	12.7
50,000 - 64,999 DM	2.3	16.9	18.1	12.8	8.0	19.9	14.3
65,000 - 79,999 DM	4.7	13.9	18.1	9.9	2.7	20.6	12.3
80,000 - 99,999 DM		10.0	11.1	7.0		15.3	8.2
100,000 DM and more		4.5	4.2	3.5	1.8	5.3	3.7
without statement	2.3	4.5	5.6	3.5	3.5	4.6	4.1
n	43	201	72	172	113	131	244

Table 68: Annual Before-tax Income (in DM) of the Graduates at the End of their Study

(in percent)

During the study the income structure changed significantly further to the advantage of the male graduates (Chi square = 29.469, DF = 8, sig. = .000), and the older graduates (Chi square = 75.484, DF = 8, sig. = .000). As a result of leaving paid employment while studying at a distance, 55.8 % of the females and 21.4 % of the males were without their own income at the end of their study. Just 15.0 % men earned less than 35,000 DM but this was the case for 27.9 % women. In the income group of 35,000 to 64,999 DM, there were 30.8 % of the males and 9.3 % of the females. However, a large increase in the number of men is observable who at the end of their study earned an annual before-tax income of 65,000 to 99,999 DM. Every fourth male graduate (23.9 %)

received an income of this size. The same was true for just 4.7 % females. 4.5 % men had an income of 100,000 DM and more, and there was not a single woman in this category. Altogether, every second male graduate (57.6 %), but less than every third female graduate (30.4 %) received a clearly higher income in the course of their study. Female graduates more often lost income (34.8 %) compared with the male graduates (12.7 %), because they more often completely or partly left paid employment.

The level of income has increased for most of the students after graduating. In comparison to the time before they finshed their study, 70.8 % of the men and 84.4 % of the women now receive a higher salary. However, every fourth graduate (24.6 %) is in the

annual before-tax income	female	male	Diplom I	Diplom II	age when graduating			all
					< 32	32 - 38	≥ 39	
without income	30.2	3.5	11.1	7.0	15.4	8.0	2.5	8.2
less than 20,000 DM	14.0	2.5	2.8	5.2	9.2	2.0	3.8	4.5
20,000 - 34,999 DM	9.3	6.5	4.2	8.1	21.5	3.0		7.0
35,000 - 49,999 DM	11.6	17.4	12.5	18.0	29.2	16.0	6.3	16.4
50,000 - 64,999 DM	20.9	17.9	15.3	19.8	10.8	20.0	22.8	18.4
65,000 - 79,999 DM	7.0	15.9	13.9	14.5	4.6	21.0	13.9	14.3
80,000 - 99,999 DM	7.0	17.4	20.8	13.4	4.6	18.0	21.5	15.6
100,000 DM and more		16.4	16.7	12.2	3.1	9.0	27.9	13.5
without statement		2.5	2.8	1.7	1.5	3.0	1.3	2.0
n	43	201	72	172	65	100	79	244

Table 69: Present Annual Before-tax Income (in DM) of the Graduates

(in percent)

same income group, and 2.7 % of the graduates lost some income. In general, it can be said that studying at the FeU was financially profitable for the graduates.

Also, after the graduates completed their study, there were significant sex differences in income (Chi square = 57.235, DF = 8, sig. =.000). Men, on average, receive higher salaries than women. Every second male graduate (49.7 %) has an income of 65,000 DM or more a year and every sixth (16.4 %) earned more than 100,000 DM (31.9 % of the men aged 38 years or older). Among the female graduates, 14.0 % have an income higher than 65,000 DM and less than 100,000 DM. None of the women is in the income group above 100,000 DM. Every third male (35.3 %) as well as every third female graduate (32.5 %) has an income of more than 35,000 DM and less than 65,000 DM. Women were in the lowest income group (less than 35,000 DM) more than the average (23.3 %) as compared to this only 9.0 % males were in this group. Seven of ten women who had an income in this level had part-time employment. The same was true only for four out of seventeen men. Nearly every third woman (30.2 %) but only 3.5 % of the men currently have no income of their own.

There is a high correlation (r = .984) between the income of the currently employed male graduates and the perceived need for the university degree in the present job. The higher the income of the males the more often the graduates mention that a degree is essential for their job. This opinion was held by 48.5 % in the income group above 100,000 DM and by 47.8 % in the group higher than 65,000 DM and less than 100,000 DM. The same was true only for 30.0 % of the graduates in the income group higher than 35,000 DM and less than 65,000 DM, and for 22.2 % in the income group of

less than 35,000 DM. Regardless of their level of income, female employed graduates were convinced that a university degree was essential for their job.

As expected, a close relation exists between the present level of income and the present age of the graduates. Low income earners were more often in the group of the younger graduates and those with higher incomes were more often middle-aged and older graduates. The highest incomes were earned by graduates who were more than 38 year old; 63.3 % had an income of 65,000 DM or more a year. The same is true for only 48.0 % of the graduates between 32 and 38 year of age and just 12.3 % of the younger than 32 year old graduates.

present field of activity	less than 35,000 DM	35,000 DM - 64,999 DM	65,000 DM - 99,999 DM	100,000 DM and more	n
business, trade	10.2	25.4	47.5	16.9	59
bank/insurance clerk	10.5	42.1	42.1	5.3	19
technical clerk		22.7	59.1	18.2	22
consultancy	27.6	34.5	17.2	20.7	29
engineer/natural scientist		10.0	50.0	40.0	20
others	17.4	63.8	13.0	5.8	69

Table 70: Present Annual Before-tax Income by Field of Activity

(in percent)

Because Diplom I graduates, on average, were older than Diplom II graduates and income is dependent on age, it is understandable that Diplom I graduates more often than Diplom II graduates (51.4 % and 40.1 % respectively) have an income of more than 65,000 DM a year.

The highest incomes were found among those graduates who had already completed another study program. In 90.0 % of the cases, engineers and natural scientists earned more than 65,000 DM (40.0 % earned more than 100,000 DM). Also technical clerks (77.3 %) and graduates who were employed in business (64.4 %) had an income in the highest levels. Clerks at banks or insurance companies (47.4 %) and especially in consulting jobs (37.9 %) currently were earning below average incomes. Perhaps the reason for this is that especially many graduates in the consulting jobs were in internal training as assistants.

Unexpectedly, there is also a close relation between the present job position and the annual before-tax income. Jobs with more responsibilities have significantly higher incomes than it is true for specialists jobs. In the case of factory managers, business

present job position	less than 35,000 DM	35,000 DM - 64,999 DM	65,000 DM - 99,999 DM	100,000 DM and more	n
specialists/ experts	17.9	41.8	29.9	10.4	67
heads of department/ group leader, etc.	9.4	6.3	62.5	21.9	32
factory manager, business manager, attorney, etc.		10.5	47.4	42.1	19
assistance, still in training	33.3	38.1	28.6		21
career as civil servant	10.0	74.0	12.0	4.0	50
others	3.3	26.7	40.0	30.0	30

Table 71: Present Annual Before-tax Income by Job Position

(in percent)

managers, attornies etc., 42.1 % earn more than 100,000 DM a year, but the same is true only for 21.9 % of heads of departments, group leaders etc., and 10.4 % of the specialists, experts.

All employed graduates who hoped to obtain higher financial benefits from higher qualifications and who regarded their goal as realized now have a higher income compared to before they completed their study programs. The same was true only for 92.3 % of graduates who regarded this study goal as 'fairly important' and who realized this goal. Of those employed graduates who were still waiting for financial benefits from their studies of economics, currently 62.5 % receive a higher salary compared to what they earned before finishing their study. Also 48.3 % of the graduates who regard the achievement of their goal as unlikely receive a higher salary. Obviously these graduates expected to better their incomes to a higher extent than they have realized up to now and they feel they will not be able to realize their goal in the near future to the extent they hoped for. It should be mentioned, that graduates who regard their chances of bettering their financial benefits as unlikely, in general, have an income which is above average. More than a quarter of these graduates (27.3 %) currently earned more than 100,000 DM a year.

5 Further qualifications after earning a Diplom

After earning a degree at the FeU every third graduate (31.1) said they would not like to start a new study program again in the foreseeable future. This is more often the case for Diplom II graduates (36.9 %) than for Diplom I graduates (20.7 %), as these graduates were not at all opposed to studying again in the future. 30.2 % female graduates, but just 15.4 % male graduates, were sufficiently satisfied with the extent to which they had realized their goals and that they probably will not strive for further study qualifications. The burden of their distance studies in the past years did not lead to further study plans.

Of the Diplom I graduates (including those who earned already Diplom II) mentioned in 42.5 % of the cases that they have plans to earn the long-cycle Diplom II degree also. Diplom I graduates who mentioned this goal have in 40.5 % of cases already earned this goal. It is again remarkable that just 2 out of 8 women, but 35 out of 79 men (44.3 %) who earned Diplom I will now study for the higher Diplom II qualification.

The motive behind the graduates' wanting the further qualification was in most cases their estimation of the value of a Diplom I degree. Two comments from graduates describe this:

- *At the beginning of my studying at the FernUniversität the short-cycle study was described as qualitatively equal program which simply had less quantitative scope. In the meantime it emerged that the short-cycle study is recognized only*

began a further study program	female	male	Diplom I*	Diplom II	age when graduating		total
					< 32	≥ 32	
yes, to earn the Diplom II	4.7	17.4	42.5		13.3	16.8	15.2
yes, another subject at the FernUniversität	9.3	8.0	3.4	10.8	7.1	9.2	8.2
yes, another subject at a conventional university	7.0	.5	2.3	1.3	2.7	.8	1.6
yes, doctorate at the FernIniversität		5.0	1.1	5.7	5.3	3.1	4.1
yes, doctorate at a conventional university	4.7	4.5	2.3	5.7	6.2	3.1	4.5
enrolled as guest student at the FernUniversität	11.6	10.4	6.9	12.7	7.1	13.7	10.7
no start of a new study in the foreseeable future	30.2	31.3	20.7	36.9	31.0	31.3	31.1
no, content with the realized goal	30.2	15.4	19.5	17.4	19.5	16.8	18.0
like to do a doctorate		4.0		5.1	3.5	3.1	3.3
without statement	2.3	5.5	5.7	4.5	5.3	4.6	4.9
n	43	201	87	157	113	131	244

Table 72: Began a Further Study Program after Completing with a Degree

(multiple responses; in percent)

* within the group of Diplom I graduates are included the fifteen graduates who earned also Diplom II after Diplom I

as a degree of a Fachhochschule. The result is that, with respect to the tax consultant exam I was working toward, I have to accept a four year longer period of practical work.

- *It is to condemn that the FernUniversität classifies their Diplom I as a second-class study. Proof: my application to get a job as mentor in the subject 'Cost Accounting' was rejected because I just had Diplom I degree.*

After completing the economics course of studies at the FeU, 9.3 % females and 8.0 % males began another course of studies at the FeU. Women, as well as men, took "Computer Science" first of all as their new course of studies (each 50.0 %) because they wanted to better their qualifications for their current or strived for job. Every fifth graduate (20.0 %) who began with another study now studies "Mathematics" at the FeU. All other graduates mentioned the following different courses of studies: "Jurisprudence", "Teaching of Law", "Electrical Engineering", and "Continuing Education".

7.0 % female graduates enrolled at a conventional university but only .5 % male graduates did so. Accordingly, every sixth female graduate (16.3 %) began further study after completing the economics program but only every twelfth male graduate (8.5 %). Out of this group of people, nobody had finished his/her new course of studies at the time of this investigation. Every ninth graduate (10.7 %) was enrolled as a guest student at the FeU for a more or less long period. For all these graduates, 'lifespan learning' (Wedemeyer 1981) is obviously already a reality, because after completing one program of study they continued smoothly with further education at a traditional or non-traditional institution.

Also, with respect to the desired doctorate programs, it seems that the FeU is like a conventional university. Experience shows that approximately 10 % of the graduates in "Business Administration" in the FRG strive for a doctorate (Weber 1979). Every ninth Diplom II graduate (11.0 %) and 2.8 % Diplom I graduates did a doctorate at the time of our investigation, either at the FeU or at a conventional university. Graduates more often did their doc-

torate work at a conventional university than at the FeU. Those continuing at a doctorate program at the FeU were, exclusively males, whereas of those continuing at conventional universities there were two female graduates who had higher scientific qualifications as a goal. Some of the graduates (3.3 %) stated that they had learned through this investigation that, like graduates of conventional universities, it is possible for them to do a doctorate but under special requirements. Now they are also planning seriously to undertake a doctorate. In total, five former distant students received doctorate up to the time of this investigation and of these three at the FeU and two at a conventional university.

The department of economics at the FeU has a much higher number of conferred doctorates, but in most cases these were the assistants of the professors who, with only some exceptions, have studied - exclusively at a conventional university. In the opinion of some graduates it seems not easy for them as former distant students to do a doctorate at the FeU if they were not willing to work for this time as an assistant at the FeU. The reasons for this difficulty are very well-known because they are the same reasons for which they studied at a distance and not at a conventional university, namely: "time problems, family reasons, vocational or financial factors or reasons of age" (Bartels 1985, p. 41).

6 Difficulties during study

At the end of this investigation, it was aimed at obtaining information about the graduates' experiences with studying at a distance. The intention was to learn about the extent to which the graduates had difficulties in their study with respect to:

- working with the study material within the fixed deadlines,
- schedule of examinations,
- seminars,
- cooperation with the chairs,
- the usefulness and importance of the printed material.

6.1 Problems of time budgeting

"Studying at the FernUniversität is structured in two ways: On the one hand there is the chronological sequence of the different courses with special regard to the number of assignments and examinations students are required to pass within a given time limit. On the other hand there is the estimated study-time of the courses the students have to take" (Bartels 1985, p. 45). The students have some flexibility to organize the chronological sequence to some extent by themselves. "The dates for the assignments are the fixed points for the students, which they have to keep if they want to complete a study successfully" (Bartels et al 1984, p.44).

The problem of deadlines set by the FeU for the students was discussed from the beginning within the FeU as well as among the students who had a contrary view on this issue. For this reason, it

was thought it would be very important to know from the succsessful students how, in retrospect, they judged the imposed deadlines. Of course, like other things in the life, there is a tendency to describe problems in the retrospective view as less im-

problems ...	variables	problem exist ...					
		mostly or always	often	seldom	not at all	without statement	n
to work through study material within the fixed deadlines	female		14.0	55.8	25.6	4.7	43
	male	2.5	18.4	52.7	26.4		201
	Diplom I	4.2	18.1	56.9	20.8		72
	Diplom II	1.2	17.4	51.7	28.5	1.2	172
	< 32 year old		18.6	52.2	27.4	1.8	113
	≥ 32 year old	3.8	16.8	54.2	25.2		131
	employed during study	3.2	17.2	58.6	21.0		157
	not employed during study		18.4	43.7	35.6	2.3	87
	all	2.1	17.6	53.3	26.2	.8	244
within the deadlines for the assignments	female		14.0	46.5	39.5		43
	male		14.9	53.7	31.3		201
	Diplom I		19.4	50.0	30.6		72
	Diplom II		12.8	53.5	33.7		172
	< 32 year old		13.3	52.2	34.5		113
	≥ 32 year old		16.0	52.7	31.3		131
	employed during study		17.2	55.4	27.4		157
	not employed during study		10.3	47.1	42.5		87
	all		14.8	52.5	32.8		244

Table 73: Problems to Work Through the Study Material Within the Deadlines for the Assignments

(in percent)

portant when a person's goal has been successfully achieved. But this problem is a general problem of all quantitative investigations and it is not just a problem of this survey.

Every fourth graduate (26.2 %) had "no problems at all" at any time in working through the study material within the fixed deadlines. Furthermore, 53,3 % of the graduates reported that they "seldom" had problems. Only 2.1 % said they "mostly or always" had difficulties in doing the work in the study materials within the deadlines, and 17.6 % reported they "often" had difficulties. Cumulating the last two categories, it can be seen that every fifth graduate (19.7 %) had difficulties in keeping to the deadlines.

More often than the average, the male Diplom I graduates (23.4 %) had problems meeting the deadlines, while females, in general, had difficulties only in some cases (14.0 %). Employment during study had a significant effect on student difficulties with deadlines (Chi square 7.027, DF = 2, sig. = .030). Only every fifth (21.0 %) graduate among those employed while studying, but more than every third (35.6 %) not employed graduate had "no problems at all" keeping the deadlines. The differences among those graduates who said they "mostly or always" and "often", had problems with deadlines were significant because 20.4 % of those employed during study and 18.4 % of those not employed complained in this respect.

Mainly Diplom I graduates (19.4 %) and graduates employed during study (17.2 %) said they "often" had difficulties meeting the deadlines for the assignments. In contrast to that, the same was true for just 12.8 % Diplom II graduates and 10.3 % of the not employed graduates. The differences by employment status during

studying were significant (Chi square = 6.428, DF = 2, sig. = .040). Graduates who had problems keeping to the assignment deadlines in most cases (69.2 %) also had difficulties working through the study material within the fixed deadlines.

The following are some comments made by the graduates regarding the burdens of coping with the study material:

- *For the first four semesters, the initial stage of studies scarcely caused me any in spite of a full-time job and full-time study. The change into main stage studies brougth a rapid increase in the burden of coping with the study material/ time. Suddenly it was nearly impossible to finish studying the material for the assignments, although I took a part-time job.*

6.2 Observing the exam schedule

Most of the graduates had no difficulties sitting the exams at the fixed dates (63.5 %) as well as getting to the town where the exams were held (70.5 %). There were 2.9 % of the graduates who said they "always" had problems with the schedule of exam dates, and 4.9 % said they "often" had problems. This was true mainly for Diplom I graduates and for graduates 32 year and older. None of the female graduates had problems with the exam dates. However, they did experience problems getting to the town where the exams were scheduled because 2.3 % of the women said that they "always" had difficulty in this respect and 11.6 % said they "often" had difficulty. The same was true also for the younger than 32 year

problems ...	variables	problem exist ...						
		mostly or always	often	seldom	not at all	not applicable	without statement	n
in regard to the dates of exams	female			30.2	69.8			43
	male	3.5	6.0	27.9	62.2		.5	201
	Diplom I	6.9	4.2	20.8	68.1			72
	Diplom II	1.2	5.2	31.4	61.6		.6	172
	< 32 year old	1.8	3.5	23.0	70.8		.9	113
	≥ 32 year old	3.8	6.1	32.8	57.3			131
	employed during study	4.5	4.5	31.9	59.2			157
	not employed during study		5.8	21.8	71.3		1.2	87
	all	2.9	4.9	28.3	63.5		.4	244
in regard to the dates of oral exams	female			7.0	37.2	51.2	4.7	43
	male	1.5	.5	5.5	31.3	58.7	2.5	201
	Diplom I	4.2		5.6	27.8	58.3	4.2	72
	Diplom II		.6	5.8	34.3	57.0	2.3	172
	< 32 year old	.9		3.5	38.9	54.9	1.8	113
	≥ 32 year old	1.5	.8	7.6	26.7	59.5	3.8	131
	employed during study	1.9	.6	6.4	29.9	58.0	3.2	157
	not employed during study			4.6	36.8	56.3	2.3	87
	all	1.2	.4	5.7	32.4	57.4	2.9	244
to come to the exams	female	2.3	11.6	20.9	65.1			43
	male	1.0	7.5	18.4	71.6		1.5	201
	Diplom I	2.8	8.3	15.3	72.2		1.4	72
	Diplom II	.6	8.1	20.3	69.8		1.2	172
	< 32 year old	.9	10.6	15.0	73.5			113
	≥ 32 year old	1.5	6.1	22.1	67.9		2.3	131
	employed during study	1.3	6.4	22.3	68.2		1.9	157
	not employed during study	1.2	11.5	12.6	74.7			87
	all	1.2	8.2	18.9	70.5		1.2	244

Table 74: Problems in Regard to the Exams

(in percent)

old graduates and for those who were not employed while studying. It seems that these groups were dependent on public transportation or that they lived far away from the towns where the exams were held.

Some comments of graduates:

- *The exams often began at 9 o'clock in Hagen. By travelling with a train, I had to get up at 4 o'clock or earlier in the morning to arrive in good time.*

- *Because I did not officially receive a minute of leave, I either had to work in advance or make up the absent working hours. For example, I had to leave my home at midnight to be in Bochum/Hagen at 9 o'clock to sit the exam. Directly after the exam, I had to drive, again, for about 700 km to teach (unnoticed) the next day at 7.50 h. I had to drive by myself because a railroad connection did not exist at that time.*

- *Two dates for exams in a year are not enough for working students and they prolong the study considerably in contrast to the first years where more dates were offered.*

Most graduates said that they had no oral exams (57.4 %) and for this reason they could not have problems. Only 1.2 % of the graduates said they "always" had problems with the exam dates and a further .4 % said they "often" had problems.

6.3 Seminars

In the main stage of studies, distant students have to attend one seminar if they are working towards a Diplom I degree and two seminars are required in the case of a Diplom II degree. In these seminars, the students have the opportunity to practice giving a lecture and they get to meet the members of the chairs and other fellow students. Accordingly, seminars have a subject matter function as well as a social function for the students. For this rea-

problems ...	variables	problem exist ...					
		mostly or always	often	seldom	not at all	not applicable	n
of contact on seminars	female	2.3	9.3	25.6	62.8		43
	male	1.0	4.5	27.9	65.7	1.0	201
	Diplom I	2.8	6.9	18.1	70.8	1.4	72
	Diplom II	.6	4.7	31.4	62.8	.6	172
	< 32 year old	1.8	5.3	31.9	60.2	.9	113
	≥ 32 year old	.8	5.3	23.7	69.5	.8	131
	all	1.2	5.3	27.5	65.2	.8	244
to do seminar papers	female	4.7	16.3	34.9	44.2		43
	male	1.0	12.4	33.8	51.7	1.0	201
	Diplom I	4.2	13.9	26.4	54.2	1.4	72
	Diplom II	.6	12.8	37.2	48.8	.6	172
	< 32 year old	.9	15.0	38.9	44.3	.9	113
	≥ 32 year old	2.3	11.5	29.8	55.7	.8	131
	all	1.6	13.1	34.0	50.4	.8	244

Table 75: Problems with Seminars

(in percent)

son it is interesting to investigate if the students had lack of contact and to what extent they had difficulties in doing their seminar papers.

In general, two out of three graduates (65.2 %) had no lack of contact in regard to seminars. Older graduates less often had problems (69.5 %) than younger graduates (60.2 %). In 11.6 % of the cases, the female graduates said they "mostly"/"always" or "often" had problems and here especially the young women (16.0 %) experienced problems. The same was true also for every tenth Diplom I graduate (9.7 %).

More significant than the lack of contact on the seminars were problems students had in doing the seminar papers. Only every second graduate (50.4 %) had "no difficulties at all" in this respect. Female graduates, again, had the greatest problems and 21.0 % said they "mostly"/"always" or "often" had problems in tackling the subject matter the first time on her own, in writing a paper on the basis of literature which they had to work out, and also in supporting this paper in the discussion. Male graduates less often had problems (13.4 %) in this respect.

6.4 Cooperation with the chairs

Most of the graduates experienced no problems contacting the chairs (66.4 %) or with the professors (64.3 %) if they wanted to discuss study problems. In 5.7 % of the cases, students reported they "mostly"/"always" or "often" had problems of cooperation with the staff and 4.5 % had similar problems with the professors.

problems ...	variables	problem exist ...					
		mostly or always	often	seldom	not at all	not applicable	n
staff of the chairs	female	2.3	7.0	30.2	60.5		43
	male	.5	4.5	26.9	67.7	.5	201
	Diplom I		5.6	30.6	63.9		72
	Diplom II	1.2	4.7	26.2	67.4	.6	172
	< 32 year old	1.8	6.2	26.6	64.6	.9	113
	≥ 32 year old		3.8	28.2	67.9		131
	all	.8	4.9	27.5	66.4	.4	244
professors	female	2.3	7.0	34.9	55.8		43
	male	.5	3.0	29.9	66.2	.5	201
	Diplom I	1.4	1.4	36.1	61.1		72
	Diplom II	.6	4.7	28.5	65.7	.6	172
	< 32 year old	.9	7.1	31.9	59.3	.9	113
	≥ 32 year old	.8	.8	29.8	68.7		131
	all	.8	3.7	30.7	64.3	.4	244

Table 76: Problems with the Chairs

(in percent)

6.5 Usefulness of the printed information material

During the semesters, the FeU students received an information paper every two weeks called "Information". This publication contains information about the departments, the central institutions, or the university administration and this information is considered to be important for students' study success.

45.9 % of the graduates had "no problems at all" in finding information that was important to them. Female graduates (51.2 %) and Diplom I graduates (48.6 %), more than the average, had no problems with the information material. In contrast, every seventh graduate (14.7 %) "mostly"/"always" or "often" had problems finding within the full range of published information items relevant to them.

variables	problem exist ...					
	mostly or always	often	seldom	not at all	not applicable	n
female		16.3	30.2	51.2	2.3	43
male	1.0	13.4	40.3	44.8	.5	201
Diplom I		11.1	38.9	48.6	1.4	72
Diplom II	1.2	15.1	38.4	44.8	.6	172
< 32 year old	.9	15.0	38.1	44.3	1.8	113
≥ 32 year old	.8	13.0	38.9	47.3		131
all	.8	13.9	38.5	45.9	.8	244

Table 77: Usefulness of Printed Information Material

(in percent)

If the answers are differentiated by the year of graduation, then it is noticeable that graduates of 1982 very often (21.4 %) had problems using the information material. But the graduates of 1984 also had problems only to the same extent (19.2 %).

In general, the proportion of graduates who had "no problems at all" with the use of the information material seems too low. In a distance education system it is imperative that the distant students effortlessly and continuously receive information that is

significant for their study program. For this reason, the FeU should think about how they could develop the student information system in a way that is more comfortable for students.

Some of the graduates expressed the wish to receive further information about the FeU after they graduated:

- *It was noticeable that after I completed my study program that all information abruptly stopped.*

- *At this part I would like to comment that it would be desirable to receive information sometimes about the FernUniversität and their current development (change of professors, new course offers, etc...).*

- *Maybe it would be possible to organize a meeting of all graduates in Hagen.*

7 Conclusion

In the first half of 1985 the author, in cooperation with the Board of Examination of the Department of Economics at the Fern-Universität conducted a written survey of all graduates in the course of studies 'Economics'. The graduates surveyed were those who had completed their study by the end of 1984 with a Diplom I or Diplom II degree. The response rate of 77.5 % can considered as very high.

The present report includes some statistical data about the exams and the graduates on the one hand, and results of the written questionnaires on the other hand.

In general, the distribution of the number of new enrollers in economics from the different states of the Federal Republic of Germany were reflected in the statistics of the graduates. The graduation rates were to a large degree independent of the regional origin of the students.

Every sixth full-time student of the enrolment year 1975/76 has completed the economics program successfully. The students of this enrolment year were significantly more motivated than students registered later. It can now be expected that approximately every eighth graduate will earn a degree. The graduation rate of the part-time students is clearly lower than the rate for the full-time students.

In general, full-time students have a considerably better chance of success than part-time students, although part-time students were actually the target group of the FernUniversität. The FernUniversität should develop further strategies to increase the output of graduating students but without lowering its standards.

Among those graduates who had previously studied either at a conventional university or a Fachhochschule, every ninth graduate had all the results of their previous study program accepted and every fifth had some of their previous study results accepted. Without this group, the graduation rate at the FernUniversität would be about one-third lower.

Two out of three graduates have completed their study with a Diplom II degree. Full-time students (72 %) and female graduates (70 %) preferred long-cycle study while, on the other hand, 40 % of the part-time students completed with only the short-cycle Diplom I degree.

Graduates used the option of interrupting their study programs ever since the introduction of fees for the study material. Since then every third graduate has taken advantage of this possibility. In most cases, the students obviously take time off to save costs when they have completed their studies in the time allowed, and/or they have already received the necessary study material for completing their study.

At the FernUniversität, full-time students completed their studies, on average, after 10.6 semesters (Diplom I) and 10.7 semesters (Diplom II). Part-time students did not, on average, need

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SURVEY OF GRADUATES

Mark with a cross where applicable ☒

1 Please tell us what studying with the FernUniversität has meant for you personally! [1]

(13-15)

2.1 How important was each of these goals when you first began your studies at the FernUniversität?

2.2 To what extent has each of them happened as a consequence of your studies?

	Important for you				Has it happened?			
	Very	Fairly	Not very	Not at all	Yes, very much so	Yes, to some extent	No, but I expect it will	No, and it is unlikely
Getting a degree	①	②	③	④ (16)	–	–	–	– (31)
Developing my interests in a particular subject area	①	②	③	④ (17)	①	②	③	④ (32)
Gaining financial benefits from higher qualifications	①	②	③	④ (18)	①	②	③	④ (33)
Proving something to myself	①	②	③	④ (19)	①	②	③	④ (34)
Increasing my standing with my colleagues at work	①	②	③	④ (20)	①	②	③	④ (35)
Developing a new career	①	②	③	④ (21)	①	②	③	④ (36)
Widening my experience of life	①	②	③	④ (22)	①	②	③	④ (37)
Safegarding of my previous / current job	①	②	③	④ (23)	①	②	③	④ (38)
Become m[illegible]cultured, better inf[illegible]d generally	①	②	③	④ (24)	①	②	③	④ (39)
Improving my promotion prospects	①	②	③	④ (25)	①	②	③	④ (40)
Getting outside the limitations of my occupational environment	①	②	③	④ (26)	①	②	③	④ (41)
Learning to study systematically	①	②	③	④ (27)	①	②	③	④ (42)
Catching up with or overtaking other members of my family	①	②	③	④ (28)	①	②	③	④ (43)
Learning things relevant for my work	①	②	③	④ (29)	①	②	③	④ (44)
Making up for lack of opportunity or missed opportunities in the past	①	②	③	④ (30)	①	②	③	④ (45)

double the amount of time of full-time students. They graduated after 13.3 semesters (Diplom I) or 14.0 semesters (Diplom II). Graduates who studied exclusively at a distance finished their studies faster than those who first studied a greater or lesser part of their course at a conventional university.

The part-time students were significantly older when they graduated (Diplom I 37.5 year old; Diplom II 37.2 year old) than the full-time students (Diplom I 31.9 year old; Diplom II 30.1 year old).

In the choice of subjects, the women more often took subjects in political economics. More often than the men, the women stated that they have taken their specialization mostly out of personal interest. It may be supposed that they hoped to be confronted with subject matter which, on the one hand, would be very useful in their private lives but, on the other hand, would also be relevant to their employment.

The male graduates more often took their specialization subject in order to improve their professional ability and therefore they chose their subjects from the point of view of professional qualifications.

Most of the graduates (82 %) had absolutely no problems in writing a thesis in their subject of choice. Two out of three graduates have taken a topic from business administration - 18 %, one from business law, and a further 15 % in political economics. Only 2 % of the graduates decided to write a thesis in econometrics or statistics.

Getting a degree was the dominant initial study goal for the graduates. This goal was more important for the females (74 %) than for the males (69 %). Next to getting a degree, the graduates of the FernUniversität attached greater importance (57 %) to the goal of developing their potential as a person (self development) rather than to the goal of gaining better professional qualifications; 43 % had the opposite priority. Graduates who preferred self development goals as opposed to job/career goals in most cases achieved these goals (81 %). The same was true only for 46 % of those graduates who preferred job/career goals.

Most of the graduates (71 %) did not change their long-term goals while studying at the FernUniversität. Some Diplom I graduates had to lower their original study goals because their original goal was to complete with a Diplom II. On the other hand, some Diplom II graduates adopted more ambitious goals during their study. They especially developed expectations of bettering their professional prospects. Some wished to do a doctorate.

Successfully graduating was very important for the personal development of the 32 year and older women who had no job while studying at a distance. In most of the cases these women had to live the life of a housewife and mother and, with their studies, they experienced a totally different world. The effect of their distance studies was as a first step out of their home environment.

The family life of the younger graduates was especially affected because they were at the age where they were starting a family. The older graduates reported less often restrictions in this respect. The families - probably those raising children - of the not

6 **On the whole, how have your family, your friends, the people you work (ed) with and your employer (s) felt about your studies?**

(Ring one answer in each column)	Family (65)	Friends (66)	People at work (67)	Your employer (s) (68)
Very happy and generally encouraging	①	①	①	①
Fairly happy about it but had some reservations	②	②	②	②
Did not mind, not bothered either way	③	③	③	③
Disapproved, could not understand why I bothered	④	④	④	④
Totally opposed to it	⑤	⑤	⑤	⑤
Did not know about my studies	⑥	⑥	⑥	⑥
I did not know how they felt	⑦	⑦	⑦	⑦
Not applicable	⑧	⑧	⑧	⑧

7 **On the whole, do you consider that the FernUniversität degree is equivalent to the degrees given by other German universities? And how do you think your employer, others at work and other academics feel about it?**

(Ring one answer in each column)	Self (69)	Your employer (70)	Others at work (71)	Other academics (72)
Degree of the FernUniversität equivalent to others	①	①	①	①
Degree of the FernUniversität of lower standard than others	②	②	②	②
Degree of the FernUniversität of higher standard than others	③	③	③	③
Do not know	④	④	④	④
Not applicable	–	⑤	⑤	⑤

If you were not employed during your distance studies:

8 **Had you difficulties to find a first job?**

① Not at all ② To some extent
③ To a great extent ④ Until now I did not found a job (73)

If you did not found a job:

8.1 **What is your opinion why you are not successful in looking for a job?**

(74-76)

employed women very often (64 %) took on some domestic responsibilities if the study burden was very high. The same was less often true for most of the childless employed women, because in only 47 % of cases the partner took on domestic responsibilities. It seems that the families of not employed female students acted more on the principle of the division of labour because they did not want to block the student's goal of successfully completing the study program.

The families of male graduates (51 %) were significantly less often happy about the student's studies than was the case for female graduates (70 %). The friends of female graduates disapproved of their studying more often (16 %) than was the case for male graduates (10 %).

Most of the people at the student's work place, and the employers, were informed about the student's distance studies. However, every fourth colleague (28 %) and 32 % of the employers were not informed at all. Female graduates informed their colleagues and employers of their studies less often than was the case for male graduates. The greater secrecy among the female graduates indicates, again, a clear discrimination against the women. If the men were more negatively regarded for simultaneously undertaking a study program while working at a job, then the same was true for the women to an even greater extent. The fear of losing her job was very characteristic of the women.

The graduates think that there was no difference at all between the Diplom which they earned at the FernUniversität, in comparison to degrees conferred by the conventional universities. Every sec-

9 **Are you currently working, a homemaker or not employed? How was it when you first enrolled at the FernUniversität and how was it during the study ?**

2

	When first enrolled (13)	During the study (14)	Currently (15)
Full-time employment	①	①	①
Part-time employment	②	②	②
Student	③	③	③
Homemaker	④	④	④
Unemployed	⑤	⑤	⑤
Retired	⑥	⑥	⑥
Others	⑦	⑦	⑦

9.1 **Please describe your job!**

	Own first regular job	Job when first enrolled	Current' job
Job title and nature of occupation	(16-19)	(26-29)	(36-39)
In which branch you were employed? (*Trade, industry, etc.*)	(20-21)	(30-31)	(40-41)
Had you qualifications for the occupation? (*Apprenticeship, degree, etc.*)	(22-23)	(32-33)	(42-43)
When did you take up this job?	(24-25) 19 . .	(34-35) 19 . .	(44-45) 19 . .

10 **Have you changed your job since you completed your study at the FernUniversität?**

(Count as a new job any change that involved any change of employer, substantial change in the nature of your duties, promotion, change of status or retirement, becoming a full-time homemaker or return to paid employment.)

① No ② Yes (46)

ond employer (47 %) thought that the degree of the FernUniversität had the same value; the opinions of colleagues were more negative in this respect. Academics of other universities attract attention in so far as the majority say that the Diplom II of the FernUniversität is at a lower standard compared to the degree of a conventional university. We assume that these academics were prejudiced against distance education because they think that academic study is possible only at a conventional university. Also, in another sense, it is very clear that the Diplom of the FernUniversität is equivalent to degrees conferred at other universities. Two out of three graduates (64 %) had the experience that they encountered neither pros nor cons with respect to their degree.

Before the graduates started with their studies at a distance, 88 % of the men, and 70 % of the women were employed. Female graduates were mostly employed in business, while the original field of activity of the male graduates was more diverse. Every fourth male was employed in business, and every seventh worked as an engineer/natural scientist or was employed by the government.

At the beginning of study, 37 % of the females and 78 % of the males had a full-time job. During their study program there was a significant drop in the extent of full-time employment. Only 14 % of the females and 60 % of the males worked full-time while studying at a distance. Among part-time students, in general, there were relatively few changes observed with respect to their employment. For this reason it can be said that male part-time students really studied while working for a living.

In the first part of 1985, when this research was carried out, only 3 % of the graduates said they were unemployed. Nearly every male graduate (91 %) and 44 % of the female graduates had a full-time job. Another 19 % of the women worked part-time but only 3 % of the men did so.

All graduates who were unemployed while studying at a distance, are now in full-time jobs. The qualifications they earned at the FernUniversität have opened a new career to them. Currently unemployed graduates were not employed while studying. Housewives who did not work in a paid job during their distance studies were, in 44 % of cases, in the same position after graduating.

Nearly all graduates who did not work during their study were looking for a job after graduating (female graduates 93 %; male graduates 97 %). Female graduates encountered significantly more problems in finding a job than male graduates. Within the proportion of 'housewives' were hidden a lot of women who were looking for a job. Classifying those housewives as unemployed, than the rate of unemployment among the women would rise to 19 %. In contrast to the unemployment rate of only 3 % for the men, it is obvious that the female graduates have even more difficulties finding a first job, although they have the same formal qualifications.

Female graduates (30 %), as well as male graduates (28 %), were, in many cases currently employed in business. The proportion of women working in education or in consulting (tax or management consultant, accountant) was high (30 %). Men preferred computer jobs or jobs as technical clerks.

Three out of four graduates say they have an opportunity to use some of the knowledge they earned during their study in their jobs.

In comparison to the original job position of the graduates, the number of higher positions have generally increased after the students obtained a degree.

Graduates who were employed during their distant studies have, in 42 % of the cases, changed their job shortly before or after completing their studies. Female graduates more often changed their jobs (53 %) than male graduates (41 %). A change of job was judged to be mainly positive because most of these graduates now have better intrinsic motivation for their work; they have a better chance for promotion or other advancement; or they have a chance to use the knowledge and skills of their qualifications. No less important is the fact that the graduates' pay increased. Independent of whether the graduates have changed their job or not, three out of four graduates have tried to make use of the qualifications they earned at the FernUniversität for purposes of job change, getting a job, promotion, etc. This was somewhat less often the case for the females (70 %) than for the males (77 %). The majority (59 %) of the presently employed graduates have plans to change the type of work, either through promotion within the present company (24 %) or through a change of employer (29 %) or through a combination of promotion and work change (6 %).

The level of income has increased for most of the students after they graduated. In comparison to the time before they finished studying, 71 % of the men and 84 % of the women now receive a

higher salary. Every fourth graduate is, furthermore, in the same income group while 3 % of the graduates lost some income. In general, though, it can be said: studying at the FernUniversität was financially profitable for the graduates.

The income difference was significant by gender. Men, on average, receive higher salaries than women. While 50 % of the male graduates have a before-tax income of 65,000 DM or more a year and every sixth 100,000 DM or more, only 14 % of the female graduates have an income higher than 65,000 DM and less than 100,000 DM. None of the women is in the income group above 100,000 DM.

After earning a degree at the FernUniversität, every third graduate stated they would not like to start again in a new study program in the foreseeable future. Every third female graduate (30 %), but just 15 % of the male graduates, were content with the extent to which they have realized their study goal such that they will not strive for further study qualifications. Every tenth graduate began another course of studies at the FernUniversität or at a conventional university after completing the economics program. In most cases the graduates studied 'Computer Sciences' or 'Mathematics'

Up to the time of this research, 11 % Diplom II and 3 % Diplom I graduates had done their doctorate. Graduates studied for their doctorate at a conventional university more often than at the FernUniversität. While it was just male graduates who did a doctorate at the FernUniversität, there were also two female graduates who are working on higher scientific qualifications at con-

ventional universities. Up to the time of this investigation, a total of five former distant students had received a doctorate, three at the FernUniversität and two at a conventional university.

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Center for the Developing of
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February 1985

Dear

First of all we would like to congratulate you for successfully completing your study program at the FernUniversität. Secondly, we are glad to inform you that ever since its establishment the Department of Economics has awarded 331 degrees. In this department one of three students succeeded in earning Diplom I (short-cycle study) and two out of three students succeeded in earning Diplom II (long-cycle study) degrees. Based upon this graduation rate, we are motivated to take up a survey of our graduates to gain insights into your experiences both at the FernUniversität and after completing your studies. In approximately a period of five years we – the Board of Examination of the Department of Economics in cooperation with the Center for the Development of Distance Education – would like to start a follow-up study concentrating on your further personal and professional development.

We ensure you that all the information that you will provide us for this study will be kept strictly confidential and used for research only. The report will include combined statistical statements and data, the names will be kept anonymous. However, please do not forget to write your name and adress on the last page of this questionnaire, as we need it for maintaining our files and for contacting you in future during the follow-up study. We will also be glad to send you the report of this study.

As a pioneer successful student of new type of university in the Federal Republic of Germany the information provided by you will not only be of great importance for the future students but will be of immense value to the FernUniversität. Therefore, we request you to fill up the complete questionnaire very carefully and send it back to us as soon as possible within a period of one month, using the reply paid envelop.

Some of the graduates have already participated in a previous survey conducted by the Center for the Development of Distance Education. Even if you have already participated in this survey, please take trouble once again to complete this survey also.

Thank you very much for your help and cooperation.

Dr. Heinz Hoffmann

Board of Examination of the
Department of Economics

Dr. Jörn Bartels

Center for the Developing
of Distance Education

3 Did you find that your long-term goals changed while studying at a distance?
① Yes, to a great extent ② Yes, to some extent ③ No (46)

If yes:

3.1 Can you describe, how your goals changed? When did the goals change?

(47-49)

4 Some students feel that they have changed as a result of their university studies and experiences. Others report little or no change. To what extent do you feel that you have changed in the following ways?

	To a great extent	To some extent	Little / not at all	If anything the opposite
Become more self-confident	①	②	③	④ (50)
Developed new friendships, a more satisfied social life	①	②	③	④ (51)
Become better able to communicate with others	①	②	③	④ (52)
Become more restless, irritable or overactive	①	②	③	④ (53)
Acquired new horizons, new goals	①	②	③	④ (54)
Become cut off from the friends I had before I began my studies	①	②	③	④ (55)
Become more a person who can take the initiative where necessary	①	②	③	④ (56)
Become dissatisfied with things in my life that I cannot really change	①	②	③	④ (57)
Become a more balanced, mature person	①	②	③	④ (58)
Acquired a new way of looking at things, a different perspective on life	①	②	③	④ (59)

5 How much effect has studying with the FernUniversität had on each of these areas of your life?

	A great effect	Some effect	A slight effect	No effect
You as a person	①	②	③	④ (60)
Your social life and relation with others	①	②	③	④ (61)
Your family / family life	①	②	③	④ (62)
Your job/career	①	②	③	④ (63)
You as a member of society	①	②	③	④ (64)

If yes:

10.1 **Please describe your new jobs since completing your distance studies!**

	1st change	2nd change	3rd change
Job title and nature of occupation	(47-50)	(57-60)	(67-70)
In which branch you were employed? (Trade, industry, etc.)	(51-52)	(61-62)	(71-72)
Had you qualifications for the occupation? Which?	(53-54)	(63-64)	(73-74)
When did you take up this job?	(55-56) 19 . .	(65-66) 19 . .	(75-76) 19 . .

10.1.1 Please give details of what was involved in each of the job changes. 3

(In each case compare the new job with the one you held prior to it.)

Which of the following types of change did the new job entail? (Ring all that apply)	1st change	2nd change	3rd change
Leaving paid employment	① (13)	① (31)	① (49)
Return to paid employment	② (14)	② (32)	② (50)
Change to a new career / new field	③ (15)	③ (33)	③ (51)
Change to a different line within the same organization	④ (16)	④ (34)	④ (52)
Line promotion (within a career structure)	⑤ (17)	⑤ (35)	⑤ (53)
Promotion within the same company/organization	⑥ (18)	⑥ (36)	⑥ (54)
Change of employer/organization	⑦ (19)	⑦ (37)	⑦ (55)
Change of industry/branch	⑧ (20)	⑧ (38)	⑧ (56)
If your new job was a promotion, which of the following best describes it? (Ring one)	(21)	(39)	(57)
Normal for one of your age and experience	①	①	①
Accelerated – early due to FernUniversität qualifications	②	②	②
Accelerated – early for other reasons	③	③	③
Delayed because of your FeU studies	④	④	④
Delayed for other reasons	⑤	⑤	⑤

	1st change	2nd change	3rd change
If your new job involved change of career or change to a different line, was this:			
a) A natural development from previous jobs or a radical change from previous jobs?	(22) ① ②	(40) ① ②	(58) ① ②
b) An experiment that could be reversed or a change you could not easily reverse?	(23) ① ②	(41) ① ②	(59) ① ②
Was the new job better (1), the same(2) or worse (3) than your previous one in terms of the following? (*Write in 1, 2 or 3, as appropriate for each of the following:*)			
The security of the job	__(24)	__(42)	__(60)
The intrinsic motivation of the work	__(25)	__(43)	__(61)
The change to take responsibility	__(26)	__(44)	__(62)
The pay	__(27)	__(45)	__(63)
The chance for promotion or other advancement	__(28)	__(46)	__(64)
Chance to use knowledge, skills/qualifications	__(29)	__(47)	__(65)
What part do you think your FernUniversität qualifications played in helping you get the job? (Ring one)	(30)	(48)	(66)
Essential for it	①	①	①
A help	②	②	②
Irrelevant	③	③	③
A hindrance	④	④	④
Not applicable	⑤	⑤	⑤

Independent of whether you have changed your job or not:

11 **Have you ever tried to make use of your FernUniversität qualifications for purposes of job change, getting a job, promotion, etc.?**

① **Yes** ② **No** (67)

12 **Have you experienced any pros or cons in the job area in being a FernUniversität graduate rather than a graduate of a conventional university?**

① **Yes, advantages** ② **Yes, disadvantages** ③ **Either pros nor cons** (68)

If advantages:

12.1 **What were these?**

(69 - 71)

If disadvantages:

12.2 What were these?

(72 - 74)

13 a) How important would these job characteristics be for you in considering a potenial job?
(Ring one answer for each characteristic)

b) Which characteristics describe the job you are in at the moment? 4
(Ring all that apply)

	a) Very	Fairly	Not very	Not at all	b) Describes my job
A good income	①	②	③	④ (13)	① (29)
Varity in work duties	①	②	③	④ (14)	② (30)
Satisfied with work	①	②	③	④ (15)	③ (31)
Work with intrinsic interest for me	①	②	③	④ (16)	④ (32)
Chance to exercise leadership	①	②	③	④ (17)	⑤ (33)
Secure job	①	②	③	④ (18)	⑥ (34)
Chance to make good use of my educational experiences	①	②	③	④ (19)	⑦ (35)
Chance to make good use of my skills and abilities	①	②	③	④ (20)	⑧ (36)
Has prospects for career development	①	②	③	④ (21)	⑨ (37)
Freedom from supervision in my work	①	②	③	④ (22)	① (38)
High on-the-job status or prestige	①	②	③	④ (23)	② (39)
Independence; chance to design my own program of work	①	②	③	④ (24)	③ (40)
Decision-making responsibilities	①	②	③	④ (25)	④ (41)
Policy-making responsibilities	①	②	③	④ (26)	⑤ (42)
Opportunity to learn new skills	①	②	③	④ (27)	⑥ (43)
Opportunity to contribute to scientific or technical advancement	①	②	③	④ (28)	⑦ (44)

14 Have you any plans to try to change your type of work – either through a substantial promotion or change to a job different from those you have held so far?

① No ② Yes, promotion ③ Yes, different type (45)

If yes:

14.1 How clear are your ideas about the kind of job you want?

① Very clear – I have a particular kind of job in mind
② Fairly clear – I have decided in general terms
③ Not very clear at the moment (46)

15 **Please classify your before-tax income in one of the following classes!**

	When you first enrolled (47)	When you completed your study (48)	Currently (49)
Without income	①	①	①
less than 20,000 DM	②	②	②
20,000 – 34,999 DM	③	③	③
35,000 – 49,999 DM	④	④	④
50,000 – 64,999 DM	⑤	⑤	⑤
65,000 – 79,999 DM	⑥	⑥	⑥
80,000 – 99,999 DM	⑦	⑦	⑦
100,000 DM and more	⑧	⑧	⑧

16 Have you chosen your specialized subjects at the FernUniversität out of personal interest or because you needed qualifications in particular subjects?

① Personal interest
② Needed for qualifications for special subjects
③ Have taken a part of the subjects out of personal interest, another part out of professional qualification aspects
④ Both: personal interests and professional qualification aspects agreed (50)

16.1 To what extent correspond your chosen specialized subject with your present profession?

① Completely ② To a great extent ③ To some extent ④ Not at all
⑤ Not applicable because not employed (51)

16.2 Can you use the knowledges, which you earned at the FernUniversität, in your job?

① No ② Yes (52)

If yes:

16.2.1 Can you specify these knowledges?

(53-56)

17 Do you think that your degree of the FernUniversität has opened you a new career?

① Yes, definitely ② Yes, partly ③ Without relevance ④ More a hindrance (57)

18 Do you think that a university degree is absolutely necessary for your job?

① Yes, absolutely ② Just partly ③ Not at all ④ I do not know
⑤ Not applicable (58)

19 Do you think that you gained in higher prestige after completing your distance studies within the circle of your acquaintances?

	Higher prestige	Unchanged prestige
Within the family	①	② (59)
Within the circle of friends	①	② (60)
Within the circle of acquaintances	①	② (61)
By colleagues	①	② (62)
By employer (s)	①	② (63)
By professional counterparts	①	② (64)

20 Did your family taking on commitments during your studies?

(Ring all that apply)

① Not applicable, because I lived as single during the study (65)
① Had the opportunity to concentrate fully on studying (66)
① If the study burden was very high the family took on some commitments (67)
① No-taking off some of the load in the household (68)
① Family made some manuell activities while studying (typewriting, etc.) (69)
① In case of problems exists the opportunity to discuss the study contents with a partner (70)

21 Began you with a further study program after completing your study at the FernUniversität?

① Yes, to earn the Diplom II (71)
② Yes, another subject at the FernUniversität (which subject?) _____ (72-73)
③ Yes, another subject at a conventional university (which subject?) _____ (74-75)
④ Yes, doctorate at the FernUniversität
⑤ Yes, doctorate at a conventional university
⑥ Enrolled as 'guest student' at the FernUniversität
⑦ No start of a new study in the foreseeable future
⑧ No, content with the realized goal

If yes:

21.1 Do you have already completed this study program?

① Yes ② No (76)

Finally, a few questions about you, yourself. 5

22 Year of birth 19.. (13-14)

23 Gender ① male ② female (15)

24 Marital status

	When first enrolled (16)	Currently (17)
Bachelor	①	①
Married	②	②
Divorced	③	③
Others	④	④

25 How many children have you had?
When you first enrolled ____ Number of children (18)
When you graduated ____ Number of children (19)

26 Which type of university entrance qualifications you had when you started your studies?
① General university entrance qualifications
② Subject restricted university entrance qualifications
③ Fachhochschulreife (20)

27 Do you have completed an apprenticeship or a practical training?
① Apprenticeship ② Practical training ③ Neither apprenticeship nor practical training (21)

If yes:
27.1 Please, tell us the name of the completed apprenticeship or practical training!

_____ (22-23)

28 Have you previous study experiences before you began to study at a distance?
① No ② Yes (24)

If yes:

28.1 Which course of studies? _____ (25-26)

28.2 At which institution?
① University / Comprehensive University ② Fachhochschule
③ Others _____ (27)

28.3 Do you have completed this study program with success?
① No ② Yes ③ I am still studying (28)

If yes:

28.3.1 With what degree you completed your studies?
① University Diplom ② State examination ③ Masters degree ④ Doctorate
⑤ Fachhochschule Degree ⑥ Others _____ (29)

28.3.2 In which year you graduated? 19 . . (30-31)

29 In which year you enrolled at the FernUniversität? 19 . . (32-33)

29.1 In which stage of studies you began your studies at the FeU?
① As a beginner in the initial stage of studies
② Acceptance of previous study results from the initial stage of studies
③ Acceptance of all study results from the initial stage of studies
④ Acceptance of previous study results from the main stage of studies (34)

29.2 Do you have studied at the FeU with interruptions?
① No ② Yes, I have taken time off ③ Yes, transfer to a conventional university (35)

If taken time off:

29.2.1 Why and how long you have taken time off?

(36-40)

If transfer to a conventional university:

29.2.2 Why do you transfered to a conventional university, how long, and why do you began again your studies at the FeU?

(41-45)

30 In the following we want to learn about the extent to which you had difficulties in your study with respect to the following statements.
(Ring as approviate for each)

	Mostly or always	Often	Seldom	Not at all	Not appli-cable	
To work through study material within the fixed deadlines	①	②	③	④	–	(46)
To keep the deadlines for the assignments	①	②	③	④	–	(47)
To observe the dates of exams	①	②	③	④	–	(48)
To observe the dates of oral exams	①	②	③	④	⑤	(49)
Problems to come to the exams	①	②	③	④	–	(50)
To realize the importance of printed information material for the study progress	①	②	③	④	–	(51)
Difficulties of contact on seminars	①	②	③	④	–	(52)
Difficulties to do seminar papers	①	②	③	④	–	(53)
Difficulties with the staff of the chairs	①	②	③	④	–	(54)
Difficulties with the professors	①	②	③	④	–	(55)

31 Do you had problems in writing a thesis in your subject of choise?

① No
② Yes, but even though I had the opportunity to write the thesis in the subject of my choice
③ Yes, I had to switch to another subject (56)

31.1 Do you were satisfied with counselling during your thesis?

① Absolutely ② To a great extent ③ Only to some extent ④ No (57)

If you were not satisfied:

31.1.1 Please explain your critics!

(58-62)

Please write us in the following your full adress. If the adress should change in the next time, please inform us in this case about your new adress so that we can send you in five years the questionnaire of the follow-up study.

Name: Surname:

Street/Number:

Postal code ☐☐☐☐ Residence:

Old I.D. number: ☐☐☐☐☐☐☐

If you want to make further comments, please feel free and use therefore the empty part of this questionnaire or a separate sheet of paper.

Thank you very much for your participation!

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